Genesis
Digital Imaging, Inc.

OmniVue Vet

Installation & User Manual

OmniVue Vet
Volume 2.0

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USER MANUAL

Table of Contents

Welcome to OmniVue Vet
Welcome to OmniVue Vet……
How to Use this Manual……
Key Features……
Hardware Requirements……

How to Install OmniVue Vet……
Installation of OmniVue Vet ……
Directory and Files……
Modality Interface (M/I) and Testing……
Check Point of M/I……
Common Error's……

How to Use OmniVue Vet
Logon……
Worklist Overview…… ……
Worklist Database:

- Exam Search and Open……
- Change the Query Condition……
- Worklist Macro, Delete Worklist Macro……
- Change Patient Information (Merge, Split)……
- Change Exam status (Verify) on the Worklist……

Worklist – Query and Retrieve……

- Query ……

- Retrieve……
Worklist – DICOM CD-R Open……
Worklist – CD Backup……
- Backup CD Open……
- How to Use CD Back up……
- Tips……
Display Window Overview……
Functions of Each Icon……
- Open Worklist ……
- Exam Close……
  - Close……
  - Close All……
  - Close Current Exam and Open Next Exam ……
- Arrow……
- View Mode……
  - Non Split (1 Series)……
  - Horizontal Split (2 Series Horizontal)……
  - Vertical Split (2 Series Vertical)……
  - 2 by 2 Split (2 by 2 Screen Division)……
  - Series Layout……
  - Chest CT View……
  - Compare View……
  - Stack View……
  - Pixel View……
  - DICOM header View……
- Print……
  - Paper Print……
  - DICOM Print (Add printer) ……
- Reset, Reset All……
- Window Level (W/L), Window Level All……
- Zoom, Panning, Magnifying Glass……
- Rotate Image (Flip Horizontal, Flip Vertical, Arbitrary Rotate).
- Rotate CW, Rotate CCW……
- Measure, Compare Measure, Angle, ROI……
- Annotation……

Imaging Stitching……
Image Subtraction ……
Scout View……
Image File Open……
- DICOM File Open……
- Non-DICOM File Open……

Image File Import/Export……
- Export……
- Import……

Twain Driver Support……

Conference Folder (Add, Get, Remove)……
Image Sending……
- E-Mail……
- Exam Send (DICOM Send, Send to Folder)……..

Image Processing……..
- LUT Preset ……
- W/L Preset……..
- Sharpen Preset……

Re-Arrange Image (Auto, Manual)……..
Using External Program……
Thumbnail Window ……...
Other Features……
- Copy to clipboard……
- Toolbar Edit……..
- Pseudo Color……
- Picking ……
- Inverse……..
- Options - Preference……
- Network ……
- Database……..
- Style……..
- Viewer……..
- Environment……
- Local DB backup ……
- Hanging Protocol ……
- External Program……

Applications……
Personal purpose……
JPEG Image Display……..
Slide Making……
Teaching File Manage……
Film Digitizer……
External TWAIN Driver ……

Trouble Shooting……
Slow Viewing……..
Image Not Found……
Response Time……..
Wrong Image Sequence……
Multiple Monitor Setting……
Login Problems……..

Local DB Backup……
External Report……..
Error Message……

Appendix ……
Delete Data from Local DB……
Import……
Send DICOM……..
Toolbar Icon Description……
Pull Down Menu……
Short Cut Key……

FAQ's……..

Chapter 1

Introduction

- **Welcome to OmniVue Vet**
- **How to Use this Manual**
- **Key Features**
- **Hardware Requirements**

Introduction of OmniVue Vet

Welcome to OmniVue Vet

OmniVue Vet is DICOM viewing software, which can be installed by Users or Engineers. It enables Radiologists to do primary diagnostic interpretations (Diagnostic Workstation) and Physicians to practice patient care (Clinical Workstation). Physicians can utilize the software for teaching, research and conference activities as well as Teleradiology and Telepathology.

In addition, OmniVue Vet provides a non-linear lookup table for the outstanding image quality especially for CR images. It also allows various image processing and database management. Users can also directly access to PACS as a client using direct access of ODBC and retrieve the image data within 2~4 seconds.

OmniVue Vet is DICOM compatible including DICOM Storage, DICOM Query and Retrieve and DICOM Print for easy networking with third vendors' PACS or modalities. OmniVue Vet provides means for efficiently managing patient and medical data by integrating with the HIS (hospital information system).

How to Use this Manual

The Next chapter offers a walkthrough for typical usage of OmniVue Vet, which includes locating a Worklist, Viewing and manipulation of the image, and returning to the Worklist.

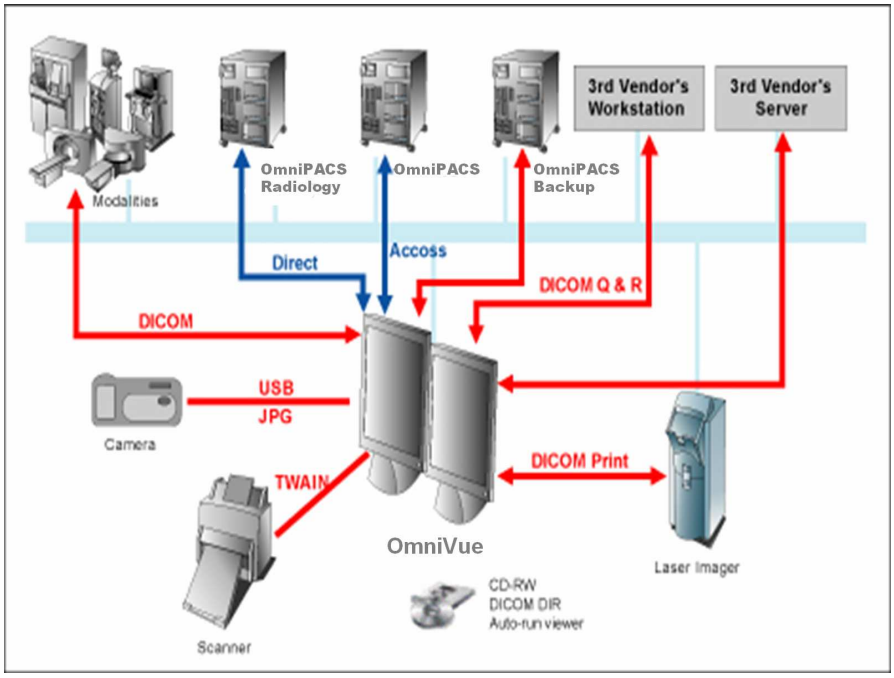
The rest of the chapters explore individual sections of OmniVue Vet in greater detail, including the Worklist and Image Viewer screens, advanced image viewing and manipulation tools / operations, printing to paper and film, creating Patient CDs (“CD/DVD backup”), sending and receiving exams, and acquiring exams from a supported acquisition device.

Appendix and FAQ’s section should further assist or guide while working on Omni Vue Vet.

Key Features

1) Local databases and conference folders can be created.
2) Client workstation of Omni-PACS Server supporting direct DB access.
3) Display and convert DICOM versus non-DICOM images (JPEG, TIFF, PCT, BMP, etc.)
4) DICOM Query and Retrieve,
5) DICOM Print, DIR and Key Notes.
6) Support one, two (Worklist, View) up to 2K

7) Support twain drives.
8) CD, DVD, and MOD backup with auto-run viewer.
9) Various image processing and editing capabilities.
10) Image stitching
11) Customize DICOM information overlay.
12) Auto logoff
13) Scout view for MR and CT images
14) Non-linear LUT
15) Support Hanging Protocol.
16) Logo of hospital can be displayed like a banner.
17) Support 3D Display Function.
18) Seamless interface with existing HIS/RIS.
19) Seamless interface with voice recognition system.
20) Support variable DICOM images including DICOM JPEG 2000.



Hardware Requirements

1) CPU: Pentium 4 or AMD equivalent.
2) Memory: 1 GB or higher.
3) HDD: 40G HDD or higher.
4) Ethernet network card: 10/100Mb NIC.
5) OS: Window XP Pro.

Chapter

2 How to Install OmniVue Vet

- **Installation of OmniVue Vet**
- **Directory and Files**
- **Modality Interface (M/I) and Testing**
- **Check Point of M/I**
- **Common Errors**

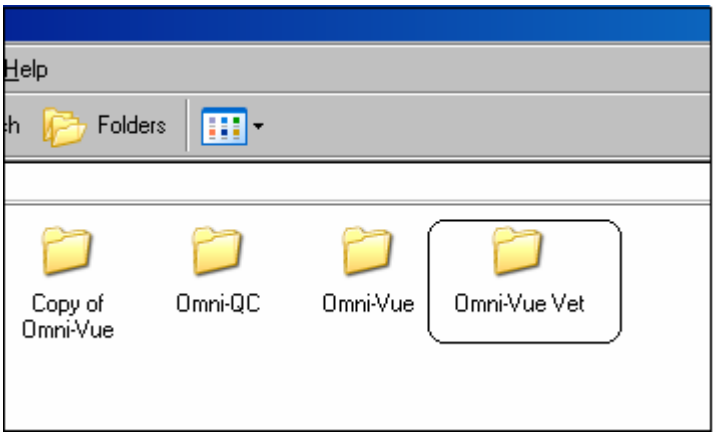
How to Install OmniVue Vet

Note: *For Installation from web download, skip to step # 4*

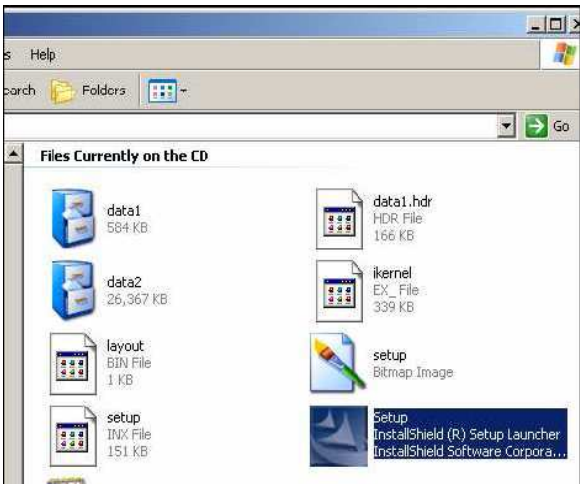
1. Insert the OmniVue Vet Viewer Installation CD.
2. To begin installation, open My Computer.

3. Click on the CD drive labeled **GenesisDigital**.

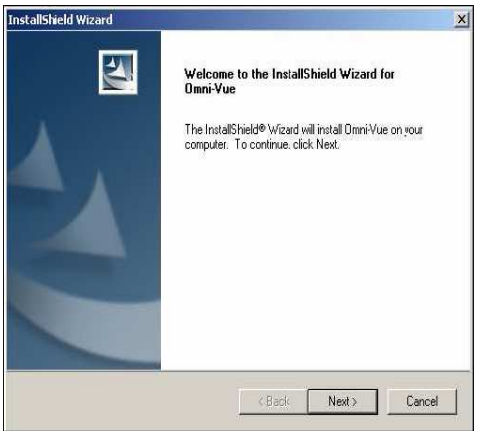
4. Click on the **Omni-Vue Vet** folder.



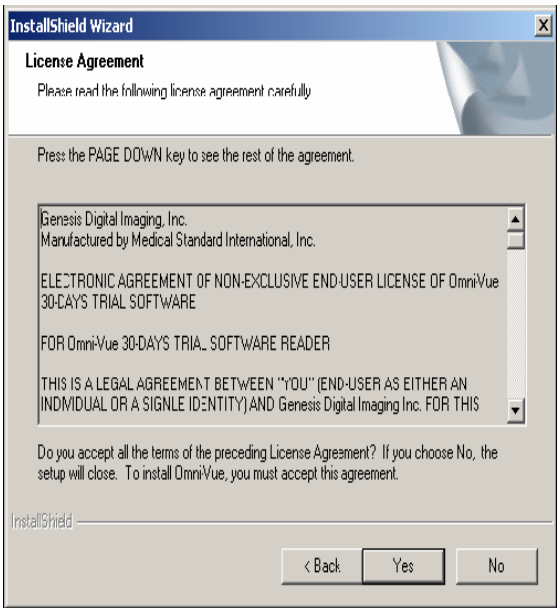
5. Click on the Setup icon to initiate the InstallShield Setup Launcher.



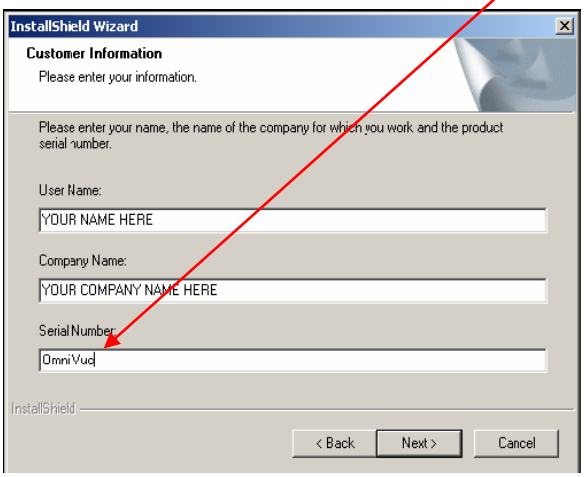
6. Click **Next**.


InstallShield Wizard
Welcome to the InstallShield Wizard for Omni-Vue
The InstallShield® Wizard will install Omni-Vue on your computer. To continue, click Next.
< Back
Next >
Cancel

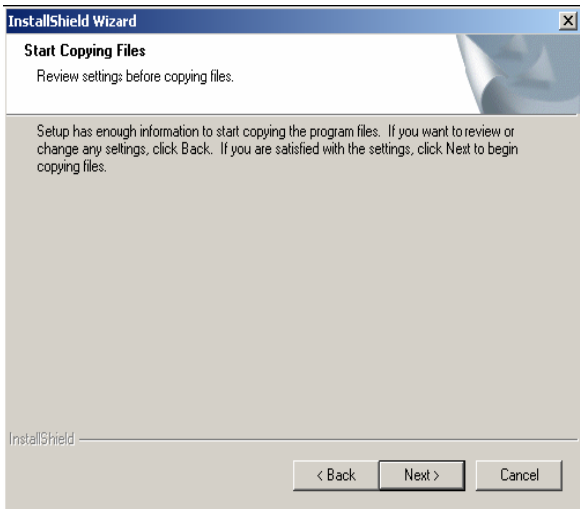
7. Click **Yes** if you accept the terms of the license agreement.


InstallShield Wizard
License Agreement
Please read the following license agreement carefully
Press the PAGE DOWN key to see the rest of the agreement.
Genesis Digital Imaging, Inc.
Manufactured by Medical Standard International, Inc.
ELECTRONIC AGREEMENT OF NON-EXCLUSIVE END-USER LICENSE OF OmniVue 30-DAYS TRIAL SOFTWARE
FOR Omni-Vue 30-DAYS TRIA_ SOFTWARE READER
THIS IS A LEGAL AGREEMENT BETWEEN "YOU" (END-USER AS EITHER AN INDIVIDUAL OR A SIGNLE IDENTITY) AND Genesis Digital Imaging Inc. FOR THIS
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install OmniVue, you must accept this agreement.
InstallShield
< Back
Yes
No

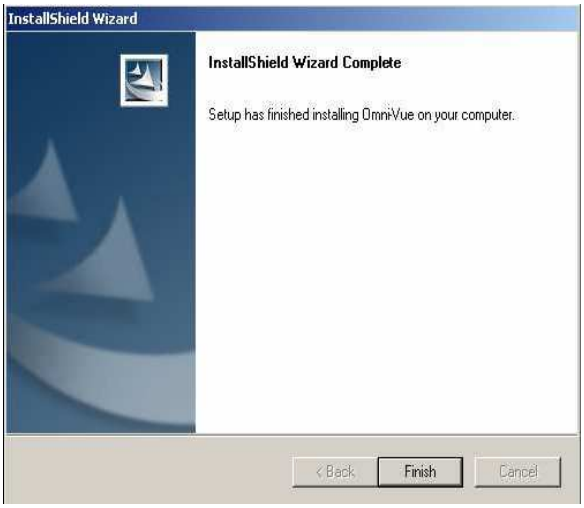
8. Enter the principal owner's name and the name of your company in the indicated areas. The serial number is "**Omni-Vue Vet**."



9. Click Next.


InstallShield Wizard
Start Copying Files
Review settings before copying files.
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
InstallShield
< Back
Next >
Cancel

10. Click Finish. This will close the installation program.



DIR and Files

Directory Info

OmniVue Vet creates the following directories (database, image, banner, resource and style) at *C:\Genesis Digital Imaging\Omni-Vue Vet*. These directories are prerequisite and shall not be deleted or renamed or modified. Multiple program files will be created as well as described below. Upon start of OmniVue Vet for the first time, two additional directories (cache, backup db) will be created automatically. In the case of these two directories are deleted, OmniVue Vet continues to work, However when you reuse cache or backup functions, an error can occur.

Database

Master.mdb

This file is necessary to operate OmniVue Vet with basic information to run and log on.
Database, User and password, User level, network, and DICOM printer settings.

Omni-Vue Vet.mdb

Local folder contains information of exam.
Study, Series, Image information tables, etc.

Image

Image save directory of OmniVue Vet.

Banner

Banner image such as facility logo can be inserted in OmniVue Vet. To display banner, create an image in JPEG file format and insert in this folder. Name files as follows:
For display in Landscape format: *L_logo_banner.jpg*
For display in Portrait format: *P_logo_banner.jpg*
The logo banner is displayed in the upper left hand corner of screen when program is running.

Backup MDB

The directory in which OmniVue Vet automatically stores the local database backup files (Master.mdb, Omni-Vue Vet.mdb). Go to Option -> Preference Setting ->Local DB Backup to setup.

Located at C:\Genesis Digital Imaging\Omni-Vue Vet are following important files:

Omni-Vue Vet.exe

OmniVue Vet Program execution file

Omni-Vue Vet RES.dll

DLL file contains resource files that are related with OmniVue Vet interface.

SCNJDPrint.dll

File manages DICOM Printer function.
An error occurs if the version does not match.

Omni-Vue Vet.ini

This file contains options and setting value.
Located at C:\Windows

Versionup.ini

To update OmniVue Vet automatically, this file contains OmniVue Vet version information and the flag which compare server's version and client's version.

Modality Interface (M/I) and Testing

Modalities must be in compliance with DICOM protocol.
AE Title, Port Number and IP Address must be assigned in both modality and OmniVue Vet
Contact the modality provider to obtain more information.
- Please review DICOM conformance statement of modality.
- Some modalities can support limited DICOM standard functions.
- Some modalities can support multiple destinations for DICOM sending but some cannot.

Modality Types

Modality with DICOM interface
Modality should be supported DICOM Storage SCU and/or SCP

Modality without DICOM Interface

(Non-DICOM Equipment)

Some Analog CT, MR and ultrasound machines are not able to support DICOM networking. These modalities require video acquisition gateway with frame grabber.

How to Configure Modality

(DICOM Network Association)

Modality DICOM Network Association

- AE Title, Port Number and IP Address must be assigned at the modality or its consoles or workstations.
- Modality must provide AE (Application Entity) Title
- Modality must provide Port Number
- Network administrator must provide IP Address for modality and OmniVue Vet

OmniVue Vet Network Association

- Check IP Address of OmniVue Vet
- AE title and Port Number are not necessary at OmniVue Vet

Modality Interface Test

Network

Perform ping test to verify that network is operating properly. If ping test fails, check network equipment and cables for hardware failure.
If ping test is successful but images are not transferred from modality to OmniVue Vet, check DICOM configuration of the modality and OmniVue Vet. Verify IP address, AE title and Port number.
100Mbps (or faster) networking is strongly recommended.

Image Quality

If images in OmniVue Vet are different than the images at the modality, check the number of bits, image processing method and the W/L setting of modality. Also check the image transfer method.

Check point of Modality Interface

Modalities compatible with the DICOM Worklist automatically retrieve patient information from the HIS. However, the Patient information must be manually typed for other modalities. When an error occurs, you should first check with the department of radiology. Modality setup and the image's DICOM information should be verified.

Some modality manufacturers may sell DICOM modules as an option, please check DICOM functionality of your modalities with manufacturer.

Common Errors

Insufficient Space

OmniVue Vet requires a minimum hard disk space of: 70MB

Auto Update Error

A common error when you use OmniVue Vet as client for Omni-Web PACS. OmniVue Vet client version attempts to download a patch file from Omni-Web PACS when you turn on your PC. If the setting of Omni-Web PACS for automatic patch download is complete, you can see Auto Update Error.

DB Connection Error

A DB Connection Error is displayed when there is a problem connecting to the database server.

1) Check the network status including proper cable connections.
2) Verify IP address of Omni database server and adjust the ODBC settings.

File Server Error

A file server error is displayed when there is a problem with network connection to Omni-Web PACS.

1) Perform FTP access.
2) Ping tests to Omni file server to check the network connection status.

Chapter 3 How to use OmniVue Vet

1) Logon

2) Worklist Overview

3) Worklist Database

4) Worklist – Query and Retrieve

5) Worklist – DICOM CD-R Open

6) Worklist – CD Backup

7) Display Window Overview

8) Functions of Each Icon

9) Arbitrary Rotate

10) Imaging Stitching

11) Image Subtraction

12) Scout View

13) Image File Open

14) Image File Import/Export

15) Twain Driver Support

16) Conference Folder

17) Image Sending

18) Image Processing

19) Hanging Protocol

20) Re-Arrange Image

21) Using External Program

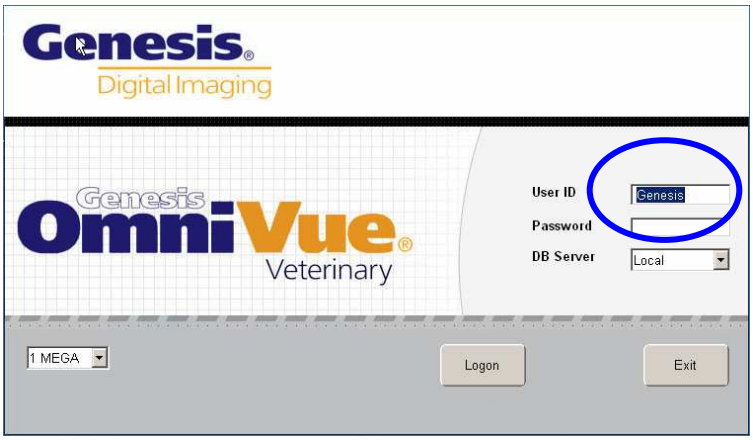
22) Thumbnail Window

23) Other Features

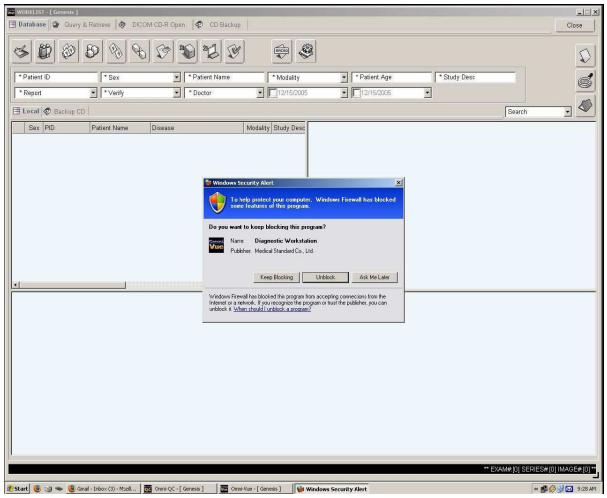
LOGON

1. Click on the Omni-Vue VET icon on the desktop to open the program.

2. When prompted, enter Genesis as your password.

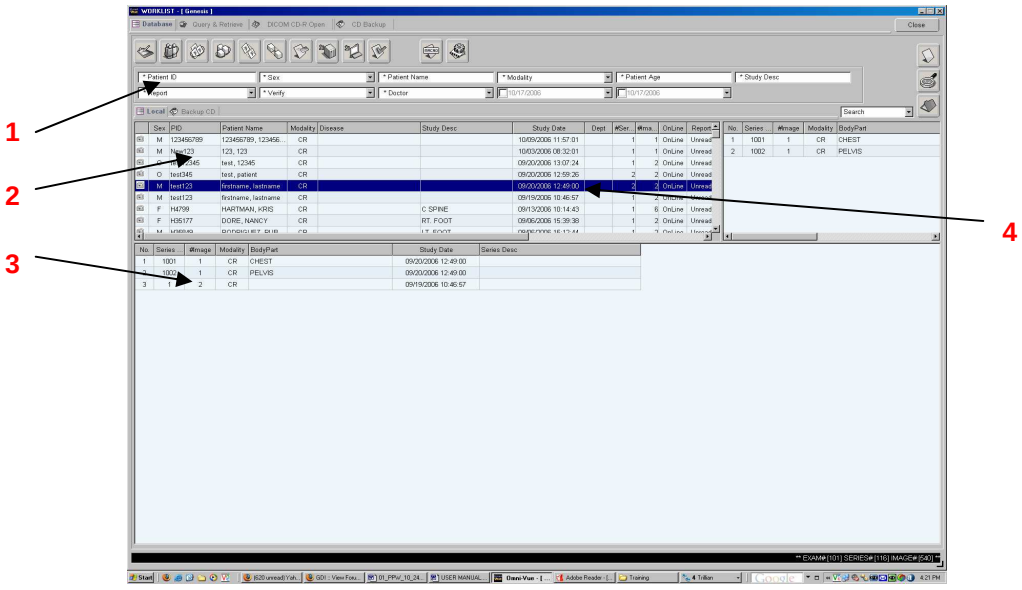


3. If you have Windows Firewall enabled, you will be prompted to unblock the program. Click **Unblock.**



Windows Security Alert
To help protect your computer, Windows Firewall has blocked some features of this program.
Do you want to keep blocking this program?
Name: Diagnostic Workstation
Publisher: Medical Standard Co., Ltd.
Keep Blocking
Unblock
Ask Me Later
Windows Firewall has blocked this program from accepting connections from the Internet or a network. If you recognize the program or trust the publisher, you can unblock it. When should I unblock a program?

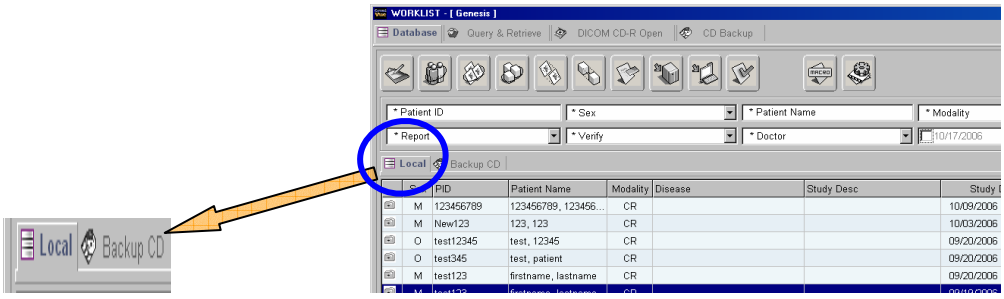
Worklist Overview



1. Query filter
2. Exam list
3. Exam details
4. Number of exams, series and images

Worklist - Database

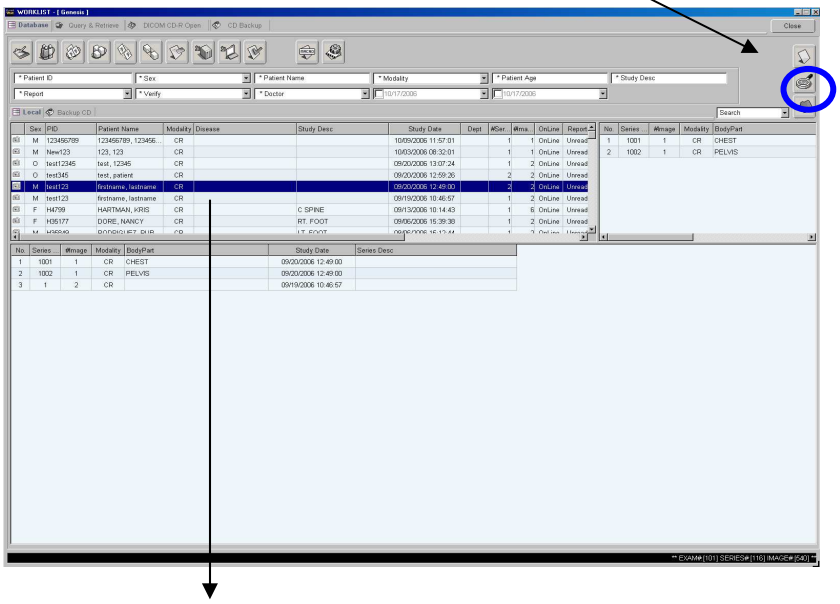
List of all Databases includes PACS, Backup CD and Conference Folder.



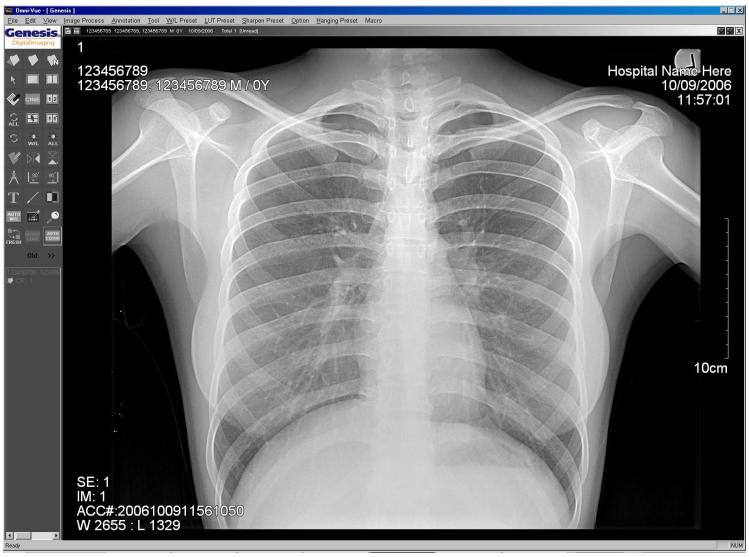
Exam Search and Open

From the Worklist menu click on DATABASE button

Choose your search criteria and press **Search**.



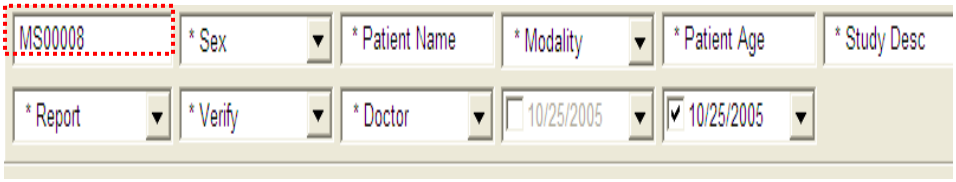
Highlight the desired exam to display patient files.
Double-Click exam to be searched and display the exam on Display Window.



Change the query condition

Input the information to be queried. (Searching by combination of Patient ID and study date is Recommend).

Case 1) Query using Patient ID: Find a patient with Patient ID is MS00008.

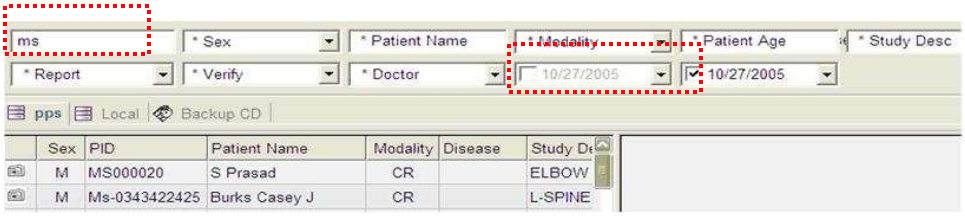


a) Type MS00008 in Patient ID field as shown in the above.
b) Click Search = Search

Case 2) Query using first two characters of Patient ID: OmniVue Vet will find all Exams with MS being the first two character of Patient ID

a) Type “MS” in Patient ID field as shown above.
b) Click Search = Search

Case 3) Query with Multiple Conditions:
a) OmniVue Vet will find exams with first two characters of Patient ID which starts with “MS”



Type “MS” in Patient ID field as shown above.
b) Select CR in Modality field (Dropdown)
c) Click Search.

= Search

Worklist Macro

User can make predefined query button in the Worklist. Suppose one radiologist need to just read CR exam and CR and CT chest exam, in this case user can create query button on the Worklist, if user click the button one time, one can get only CR exams or CR and CT Chest exams.

Add Worklist Macro

Make your own query in query field header and click Add Macro.
Type Macro Label and Description and Add
Click Close.
Click CR button (Button name will be same as Macro Label name.)
Confirm that the query properly executed or not.

Delete Worklist Macro

Click on Macro Icon
Select the list what you want to delete and click Delete and Close.

Header Customizing

Right-click on Wordlist's filters section and select Header Customize.
Check all desired fields and click OK

Change Patient Information

The Worklist buttons are located in the top left-hand corner.

Merge Patient: Change the patient information of the exam.

Merge Exam: The exam merges to another exam.

Merge to One Series: Merge the series to another series.

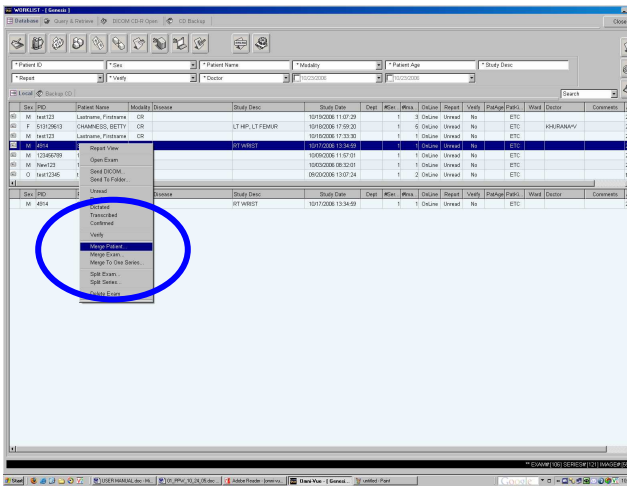
Split Exam: Split the series to another exam.

Split Series: Split the image to another series.

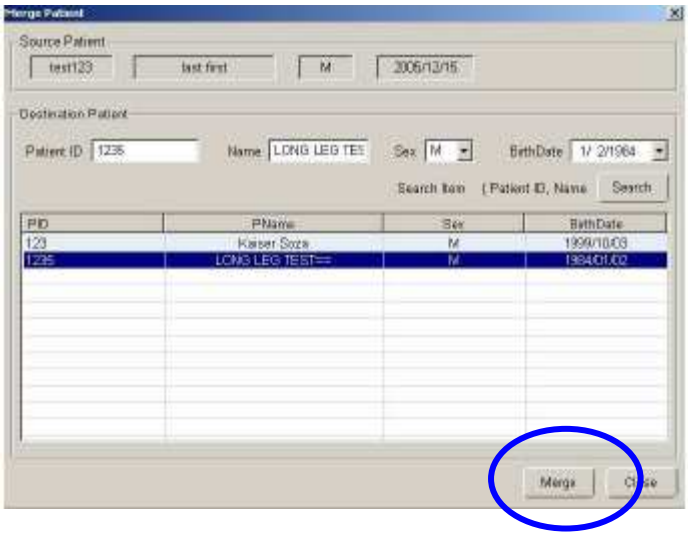
Merge Patient

Change the Patient ID, Name, Sex and date of birth of the exam.

Right-click on the exam of patient to be changed and click **Merge Patient**.



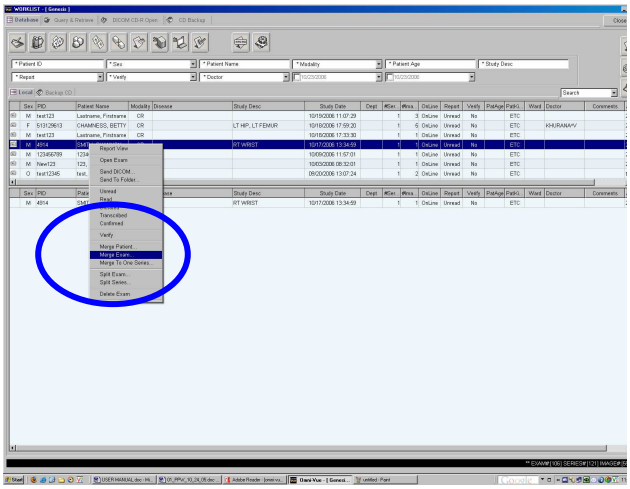
Search Destination patient to be changed.
- Type [Patient ID] and click search
- Patient ID at the DB will be displayed on the Destination Patient List.
- Click the patient on the list and click merge.



Note: If there's no Destination patient to be changed, type in the information manually.
- Type in Patient ID, Name, Sex and date of birth.
- Click 'Merge'.

Merge Exam:

Display different exam lists of the same patient on the Destination Exam.
Click 'Merge' to be merged with exam.



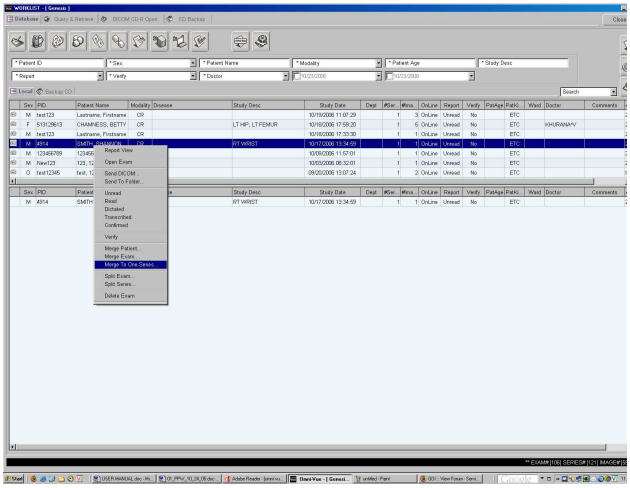
Right-click on the exam of patient to be changed and click Merge Patient.

Note:

If No Exam is selected the above error message will pop up.

Type [Patient ID] and click search.
If the patient information is in DB, list will be displayed on right portion of Destination Patient.
Click the patient and click Merge to change the patient information.
Merge with exam of another patient.
- Type in the [PID] of patient in Destination Exam and click search.
- Click the exam to be combined in list and click Merge.

Merge to One Series



Right-click to apply Merge to one Series and click ‘Merge to one series’

Merge the series to another series.

Select Key series to be seen as Series Title.
- Click the series on the Series List
- Click ‘>’ (Click ‘<’ to release)

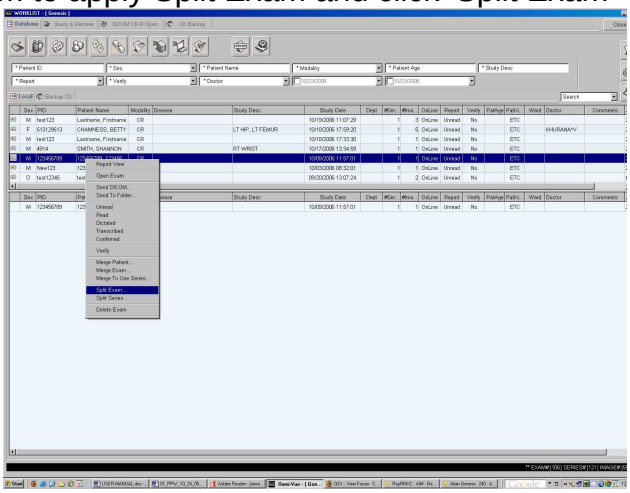
Select the series to be merged to Key Series
- Click the series on the Series List
- Click ‘>’ (Click ‘<’ to release

Click Merge

Split Exam:

Split series on exam as separate exam.

Right-click on the exam to apply Split Exam and click ‘Split Exam’



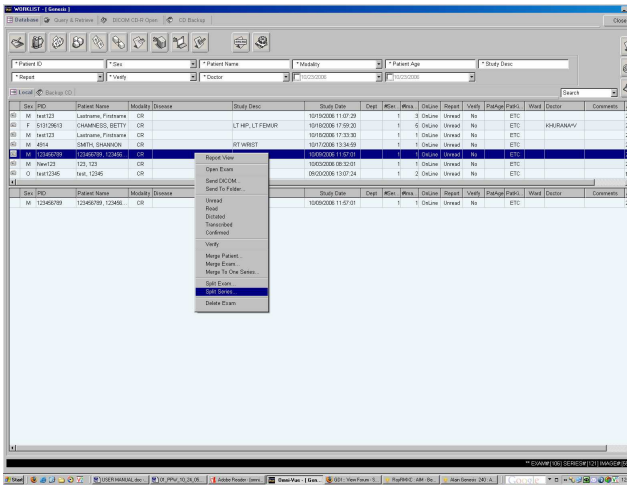
Select series to be split.
- Click the series to be split on current exam list.
- Click ‘>’ (Click ‘<’ to release)

(Use ‘Shift or CTRL’ key for multiple selection)
(Click ‘>>/<<’ to appoint/release all)

Click Split Exam

Split Series:

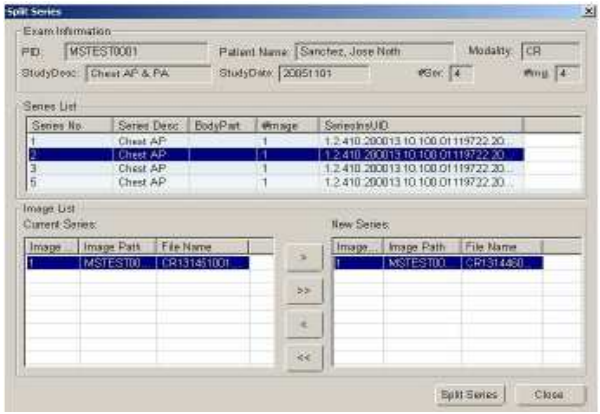
Right-click on the exam, which applies Split Series, and click ‘Split Series’



Click the image to be split on Series List
Select image to be split
- Click the image to be split on Image list
- Click ‘>’ (Click ‘<’ to release)

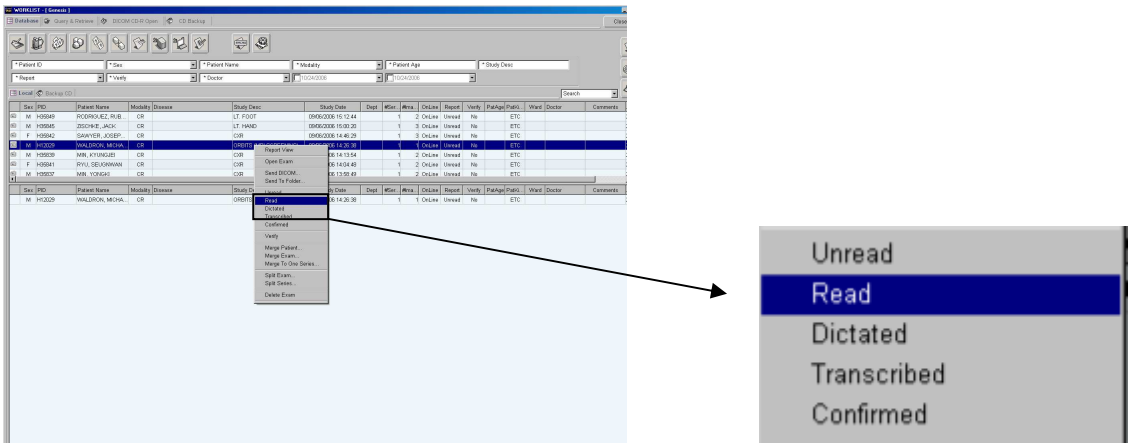
(Use ‘Shift or CTRL’ key for multiple selection)
(Click ‘>>/<<’ to appoint/release all)

Click ‘Split Exam’



Split image on series as separate series.

Change Exam Status



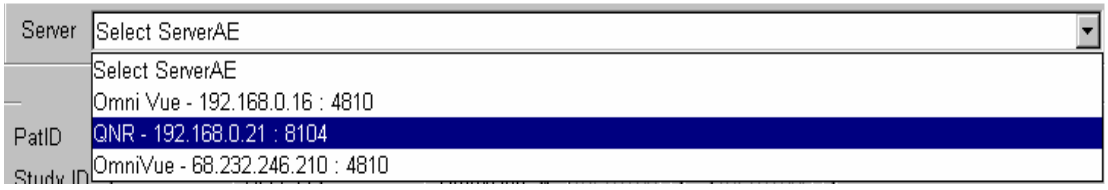
Right click on the exam and you can change the status
Authorized person can change report status on the Worklist.

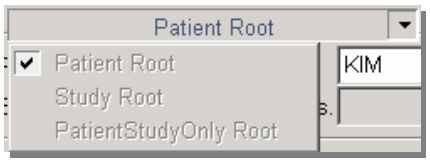
Worklist – Query and Retrieve

Query

1) Click “Select ServerAE” arrow button.

2) Choose the server to be queried.





3) Select “Patient Root” drop down.
4) Click “Search”, and display patient list.
5) Select Patients and display series list.
6) Select Series and display image lists.
7) You can also right-Click at step 5) to 7), and click Add.

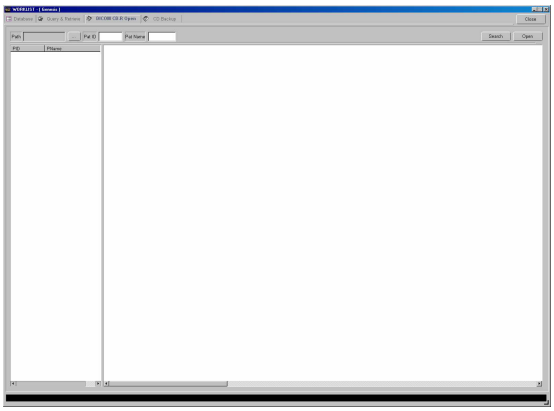
8) Display Queue list.

Retrieve

1) Click Retrieve button after generating a queue list above.
2) Images will be retrieved from the selected server and stored in the local folder in OmniVue Vet.

Worklist – DICOM CD-R Open

You can review DICOM images burned on CD or DVD which is DICOM CD-R compatible and also burn DICOM images on CD or DVD using CD Backup supported by OmniVue Vet.



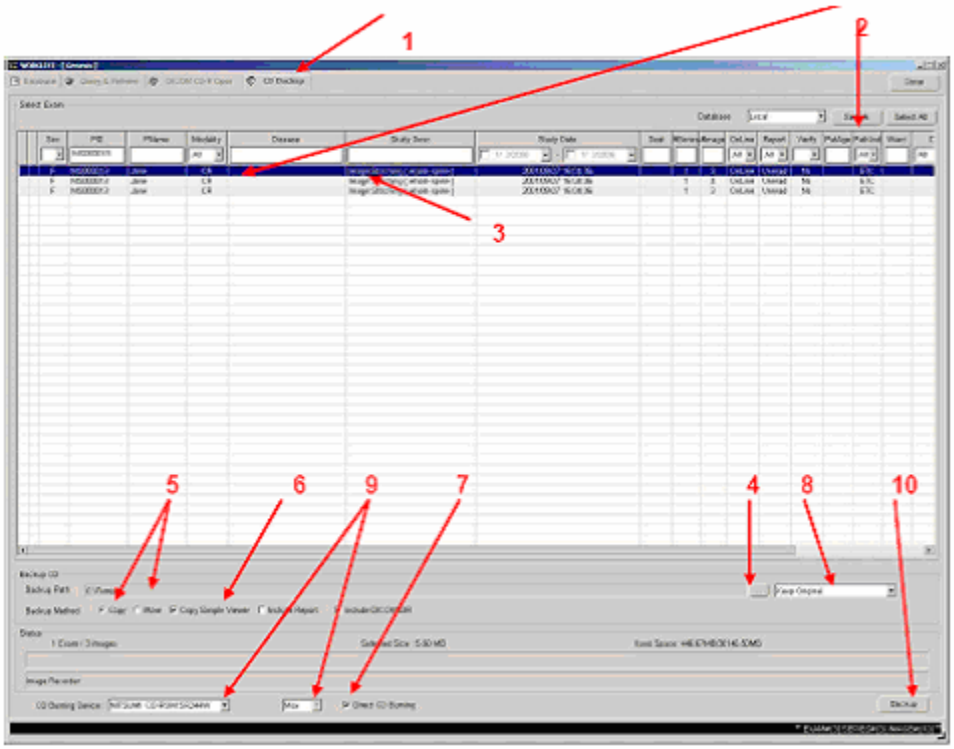
1) Open Worklist from OmniVue Vet (or) click Open icon from icon tool bar
2) Select DICOM CD-R Open tab on the w Worklist.
3) Select the driver in which you inserted the CD and click Search.
4) Or, to search specific patient, type patient ID or Name and then click Search.
5) Select patient from PID, and click Open.

Worklist – CD backup

CD burning software (Nero 6) needs to be installed to burn CD's

The Nero option box under
Option ->Preference->Environment must be checked for proper operation.

1. Click ‘CD Backup’ from Worklist window.
2. Click “Search” with proper criteria to display.
3. Select exam(s) from Worklist (to select multiple exams use Shift or Ctrl key)
4. Select backup path by clicking on "..." icon and click OK. (Default path is C:\Temp)
5. Select “Copy” to copy exams to CD but not to delete selected exams from local database or “Move” to copy exams to CD and delete selected exams from local database.
6. Select "Copy Simple Viewer" to burn a Mini-Viewer on CD together with image files.
7. Select "Direct CD Burning" for direct CD burn (if unchecked: OmniVue Vet will just copy or move the exams to temporary folder)
8. Select Compression.
9. Select CD burning device and speed.
10. Click Backup



TIPS

Tip 1. Copy and Move
There are two methods for CD Backup.
Copy: Copy exams to CD without deleting from local database
Move: Copy exams to CD and also delete exam from local database.

Tip 2. Simple Viewer
Copy Simple Viewer checked: Simple viewer is installed on CD automatically
Copy Simple Viewer unchecked: Only image files are burned on CD.

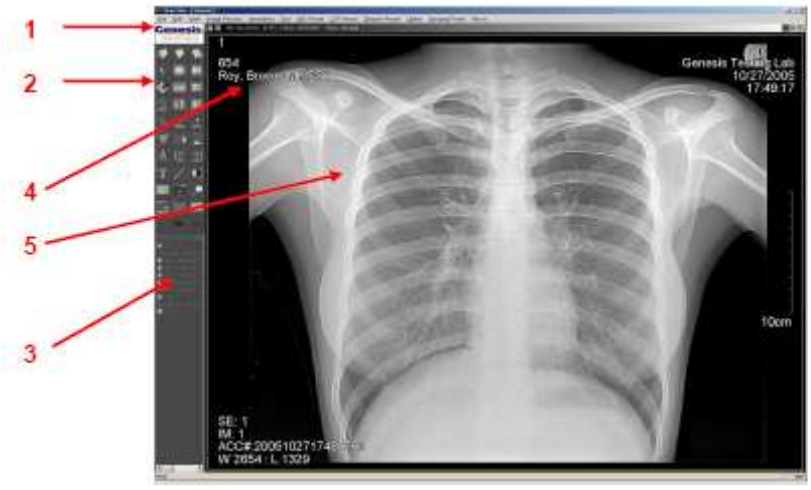
Tip 3. Direct CD Burning
Direct CD Burning checked: OmniVue Vet will directly burn the patient CD.
Direct CD Burning unchecked: OmniVue Vet will just copy or move the exams to temporary folder.

Tip 4. Compression options
OmniVue Vet will compress or uncompress images before copying files according to user setting.

Tip 5. Set CD Burning speed
The user can select CD burning speed. (CD-Rom and CD needs to support the functionality)

Display Window Overview

Functions of Each ICON



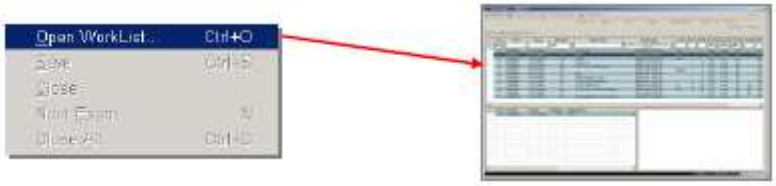
Menu List (File, Edit, View, Image Process, Annotation, Tool, W/L Preset, LUT Preset, Sharpen Preset, Option, and Hanging Protocol Macro) (1)
Selected Menu Icons (2)
Exam List: Displays open exams and series (3)
Patient information (4)

Image (5)

Open Worklist

Or select File from Menu List and Click on Open Worklist (Ctrl+O)

Exam Close/ Close All



Or select File from Menu List and Click on Close

This function closes the current displayed study or select File from Menu List and Click on ***Close All*** (Ctrl+C) this function will close all open studies.

Close current exam and open next exam

Or select File from Menu List and Click on Next (N)
This function will close present exam and open next exam

Arrow

Click Arrow icon to change to general cursor mode.

View Mode

Image Layout & Viewing Options

OmniVue Vet supports four split view modes (Non, Horizon, Vertical, 2 by 2) and 8 view modes such as Series Layout, Chest CT View, Compare View, Stack View, etc.

Non Split

Horizon Split

Vertical Split

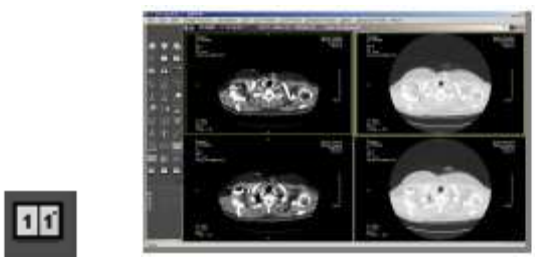
2 x 2 Split

In order to view multiple images at once, click the Tile button to change the layout.

When viewing images one at a time, click the arrow buttons in the upper right-hand corner to advance images.

Chest CT View

View mode for Chest CT. After one image displays on each window, preset Window Level as normal to compare and search.



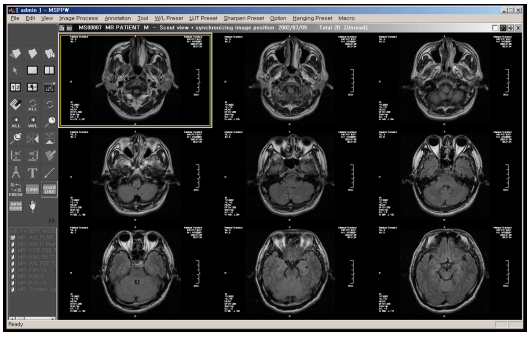
Setup value of Window Level Preset on Option _ Preference _ Viewer in Chest CT View Window/Level.

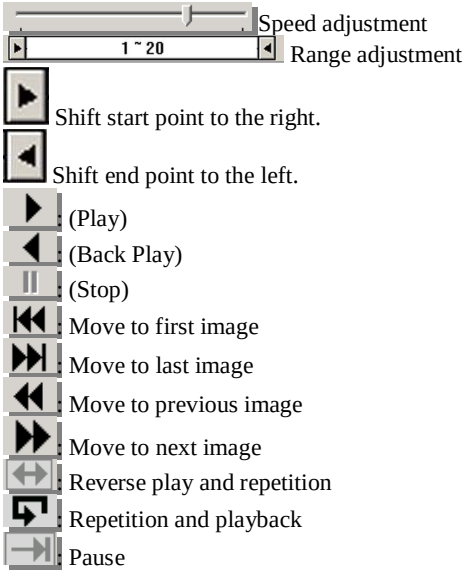
Compare View

Compare View mode is for comparison of CT, MR image. It compares exam and series on same patient or different patient.

Click the icon to display image on left window. Drag the image to right side of window to search and compare.

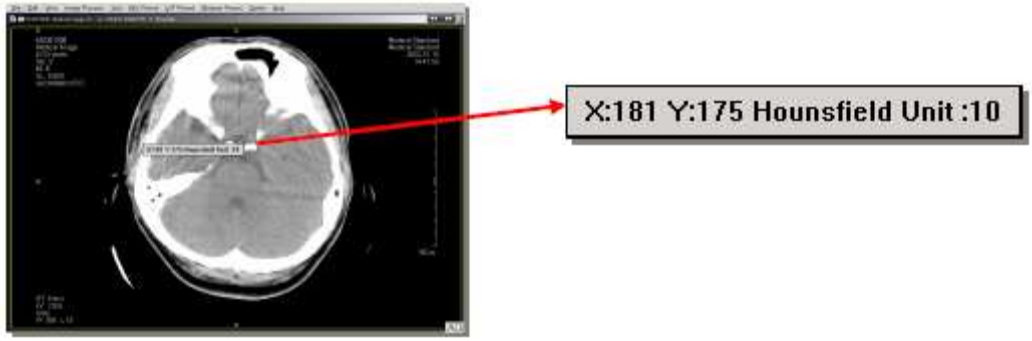
Stack View





Pixel View

Displays pixel value and coordinates of selected location. Click on the icon and move your mouse over the image and Hounsfield Unit will be displayed.



DICOM Header View

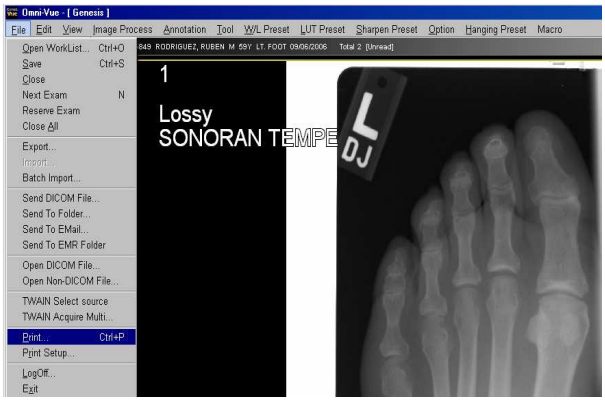
Or Click View_DICOM Header

This function displays DICOM Header information.

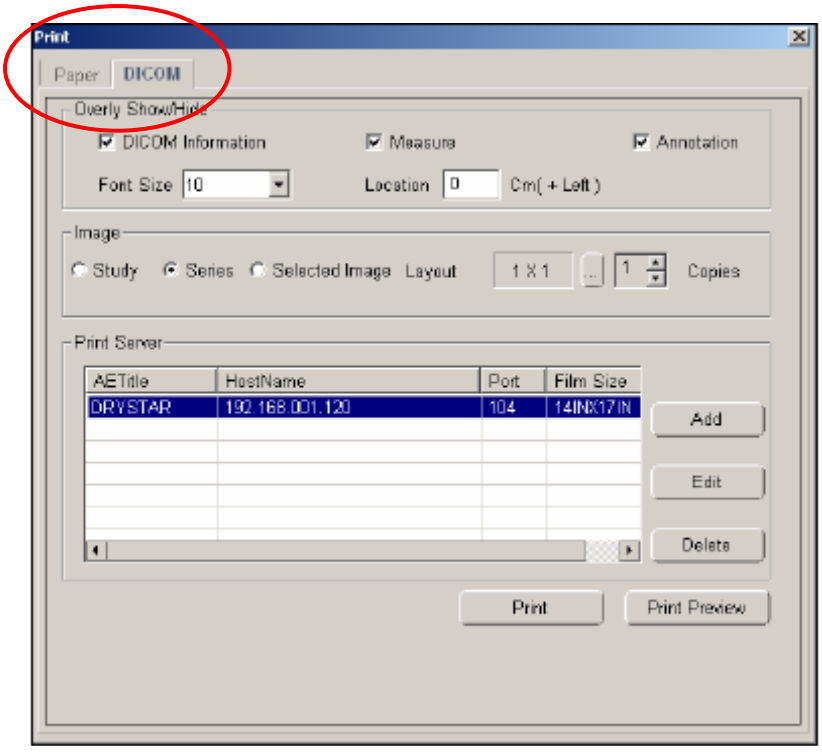
Print

1. Highlight an image and Click Print button or click File->Print

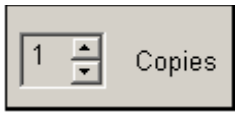
Or



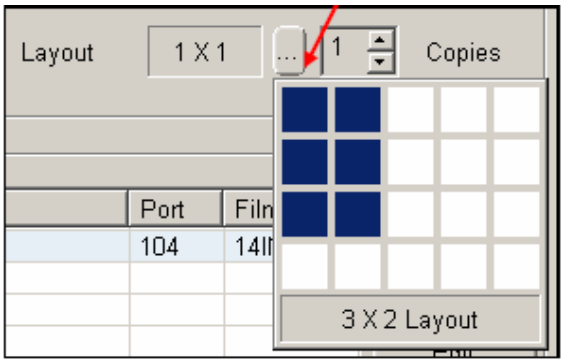
2. The following box will open, allowing you to change your printing options.



3. To change the number of copies, Click up and down arrows next to “Copies.”

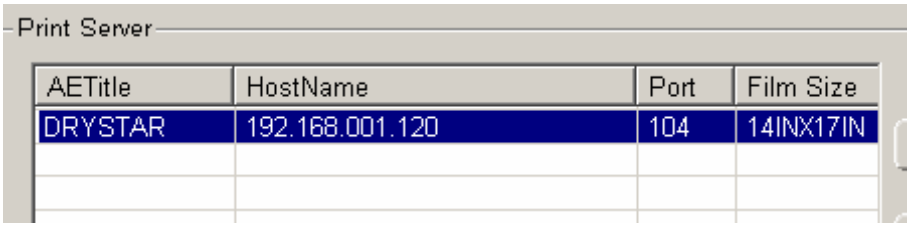


4. To change the print layout format, click on the button and drag the arrow to your desired layout.



5. Click Print Preview to view the selected layout.

6. Select the printer you have just installed in the Print Server box, and click Print.



Note: You also have the option of printing to a paper printer. To use a paper printer, click on the Paper tab in the Print window. You must have all the proper drivers installed on your computer see Image 2.

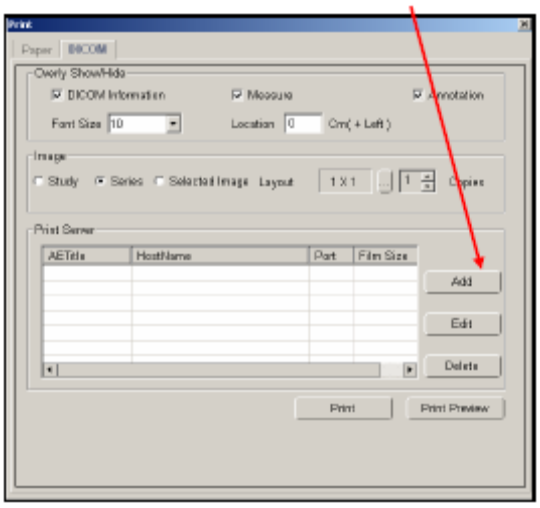
Adding a DICOM Printer

Note: You must first have an image on file and selected before adding a printer.

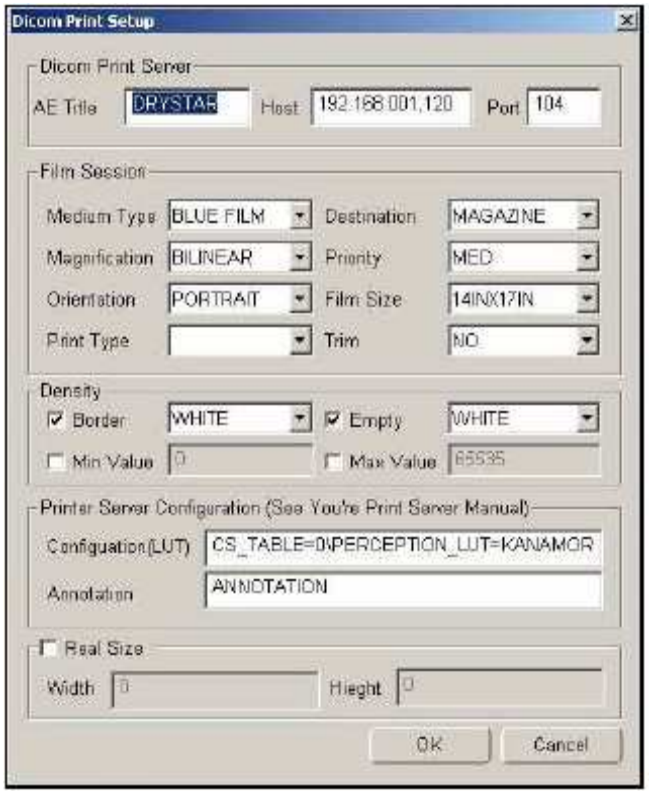
1. Click Print button to open the Print window.

2. Choose “DICOM” tab for DICOM Printer.

3. The first time you print an image, you will have to Add a printer.



4. Complete the form with your printer information. Consult your printer manual, as this information will be specific to your particular printer. See below for an example.



5. You are now ready to print.

Reset

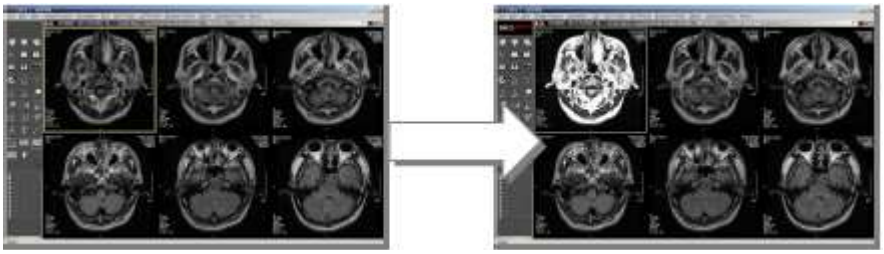
Or click Process _ Display Original and click the icon on toolbar.
This function will return the selected image to its original setting prior to any modification.

Reset All

Or click Image ‘Process _ Display All Original’ or click the icon on toolbar.
This function will return all the images to their original setting prior to any modification

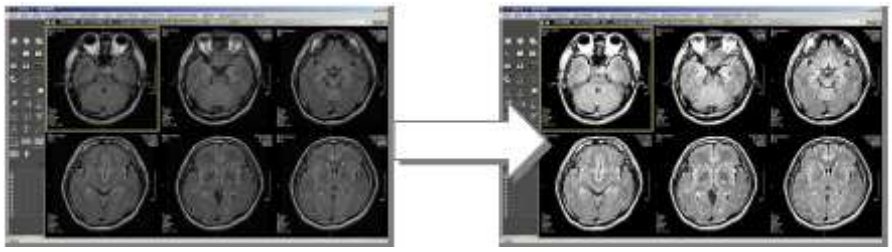
Window Level (W/L)

Click Image Process _ Window Level and cursor will be changed to W/L. Click the image and drag to the left and right, window level value will be changed. Short-cut key ‘W’ to select.



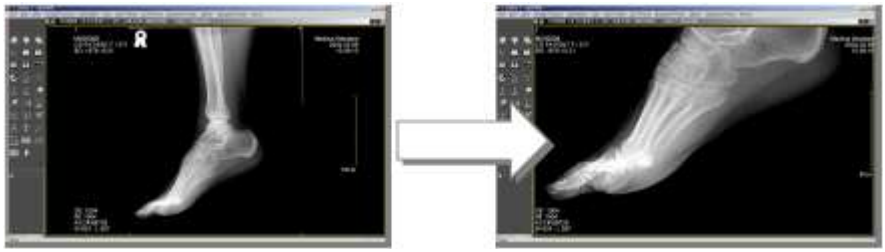
Window Level (W/L) All

Click Image Process _ Window Level and cursor will be changed to W/L. Click the image and drag to the left and right, window level value will be changed. OmniVue Vet supports window level all function by right-click drag.



Zoom

After click Zoom button, click and drag the image where you wish to see. If there are multiple images, select all (Ctrl + A) and Zoom in/out all the images. (Short-cut key: Z)



Panning

Panning image moves to another part. After click the Panning button, click the image and drag to move the image. (Short-cut key: P)

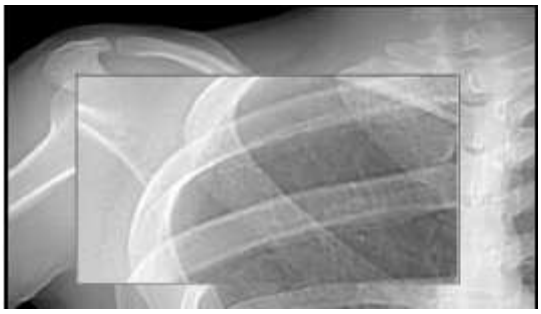
Magnify Glass

Shift + Mouse Drag Adjustment of magnifying glass
Ctrl + Mouse Drag Magnify/Reduction magnified image
Alt + Mouse Drag Adjustment of W/L

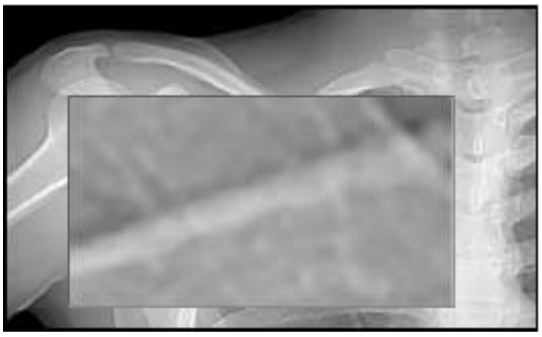
To magnify part of an image, first click on the Magnify Glass button.

The magnifying glass will initially appear as shown below.

To change the size of the magnifying glass, hold Shift, click and drag the mouse to the desired size.



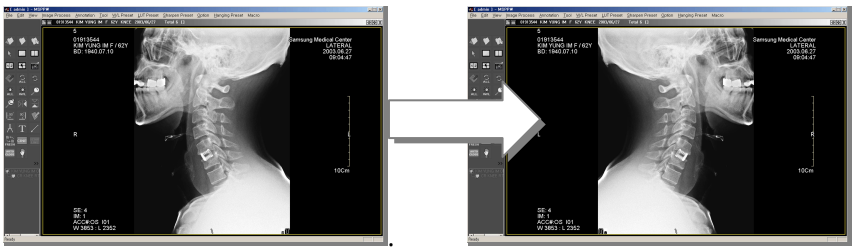
To change the zoom within the magnifying glass, hold Control, click and drag to the desired intensity. Drag up (lower magnification) and down (higher magnification).



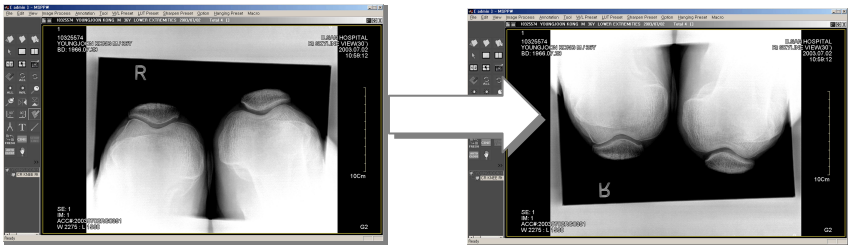
Rotate Images

To rotate or flip images, use the corresponding buttons (Flip Horizontal, Flip Vertical, Rotate CW, and Rotate CCW).

Flip Horizontal (Image Process _ Flip Horizontal or click the icon)



Flip Vertical (Image Process _ Flip Vertical or click the icon)



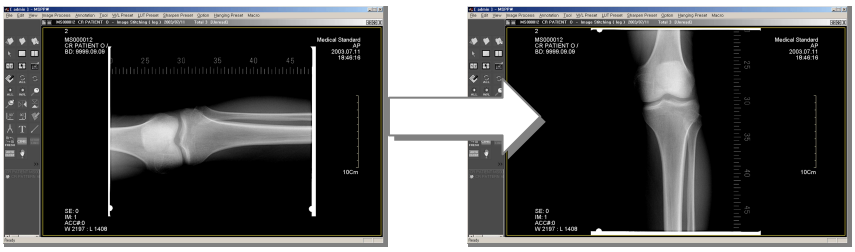
Arbitrary Rotate

OmniVue Vet can rotate an image by arbitrary degree using this feature.

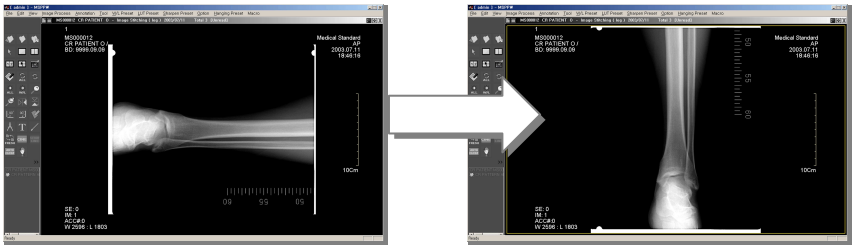
1) Click Image Process--->Arbitrary Rotate.
2) The following image will appear in the upper right hand corner of the image.

3) Click the line and move clockwise or counterclockwise
4) Click Save

Rotate CW (Click 'Image Process Rotate CCW'

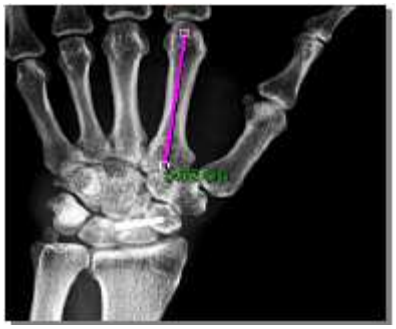


Rotate CCW (Image Process _ Rotate CW or click the icon)



Measure

Tool Measure or (Short-cut key: M)
1) Length measurement: Drag the mouse to measure the length of image.



2) Measurement between two lines: To draw the line, click the short-cut key ‘E’ and measure the length between two points.

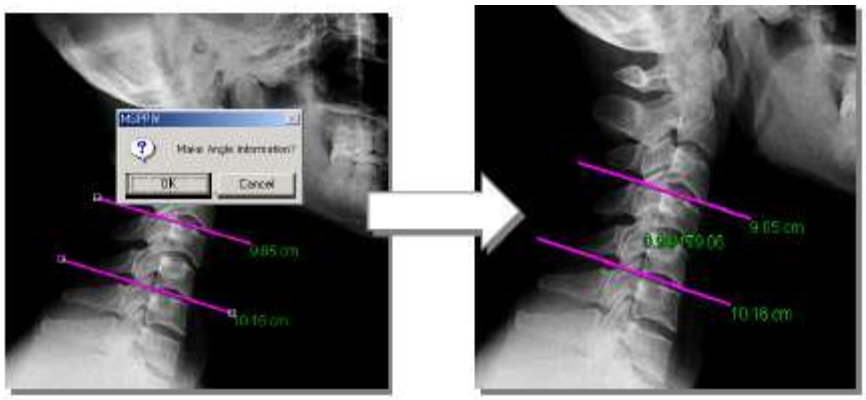
Compare Measure

To measure different lengths from one point, click Tool ROI Compare Measure and drag the mouse to draw the line. Two lines will be created and adjust by drag.

Angle

To measure the angle, click Tool _ Angle or. (Short-cut key: A)
Drag the mouse on the image where you wish to measure.

To measure the angle when lines never across.

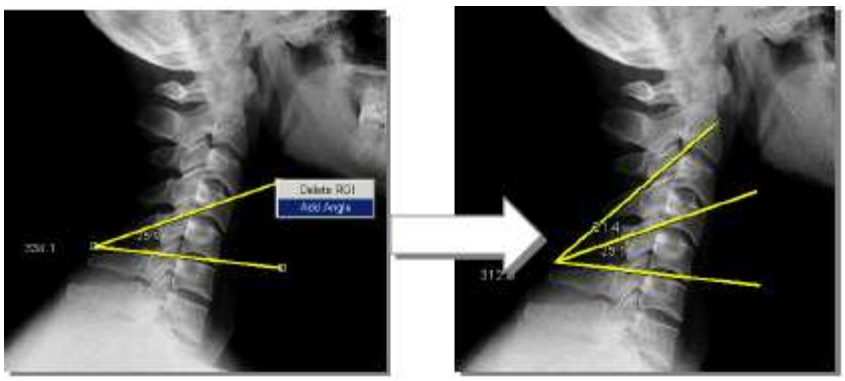


a. Draw the line for angle measurement.
b. The angle between two lines will be displayed, if you select two lines to measure the angle.
c. To select two lines, press shift button and click the lines.
d. The ‘Make Angle Information’ message will be displayed if the two lines are selected.
Click OK to display the angle.

Add Angle

Multiple angles can be measured from one point.

a. Click ‘Angle’ and select an end point. And right-click to select ‘Add Angle’.
b. Hold the end point and drag, another angle will be created.
c. It is possible to create multiple angles by same methods. (Click short-cut key ‘D’ and drag it.)



ROI

Rectangle, Circle, Polygon, and Freehand Draw

Circle

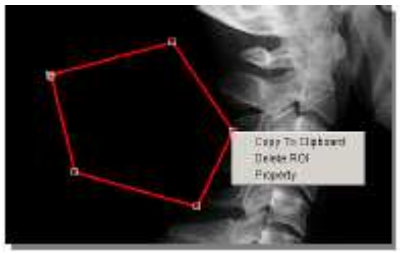
Rectangle

Polygon

Freehand Draw

ROI Option

After creation of ROI and right-click to see the menu.



1) Copy to Clipboard: Copy selected ROI parts
2) Delete ROI: Delete selected ROI
3) Property: Square, mean value of selected ROI (Hounsfield Unit will displays on CT)

Annotation

Annotation, text input.

Image Stitching

1) Open Series from Worklist

2) Change Display setting to show all images in series

3) Click Tool ---> Select Spine Image

4) Select image by order. Following message will be appeared on the each image

5) Click Tool->Image Stitching

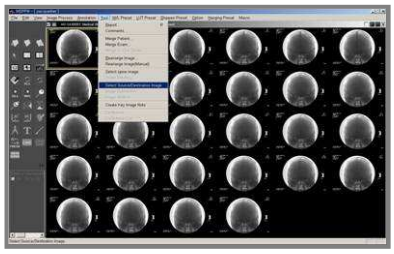
6) Adjust image using following menu

- Auto: Auto stitching.
- Reset: Recover to beginning.
- Move Up: Move the image upward
- Move Down: Move the image downward

6) Click Save

7) Stitched image will be added to the series

Image Subtraction

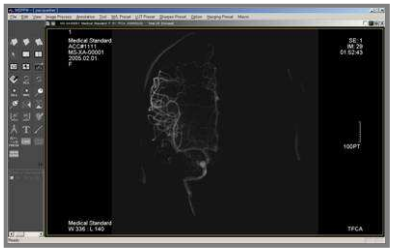


1) Click *Tool→Select Source/Destination image*.

2) Select source image.

3) Select destination image.

4) Click *Tool→Image subtraction.*



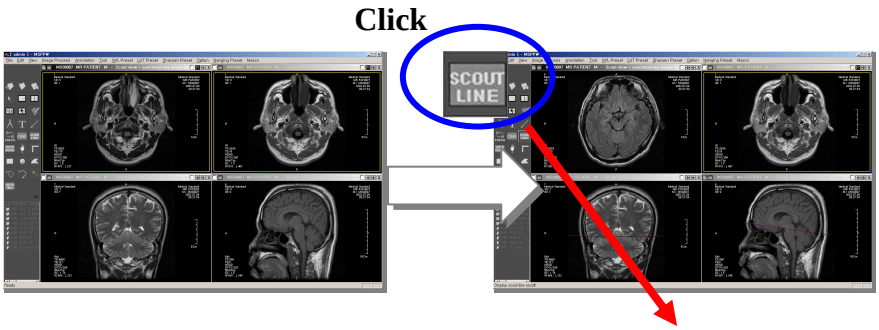
5) Subtracted image will be created.

Scout View

There are two way displaying scout line. One is using “Hanging protocol” and the other is using “Add scout image”

Scout On/Off button

If you set hanging protocol for MR or CT exams, and if series layout is selected as multi series, in this situation whenever you click one image, scout line will be drawn on other series which is crossed direction.



To see scout line on the image, just click ”Scout Line”.

Add Scout Image

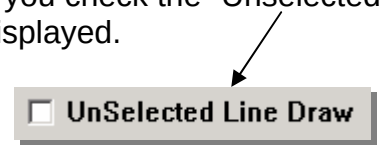
1) Right-click on the image and then select Scout Image and click ‘Add scout image dialog’

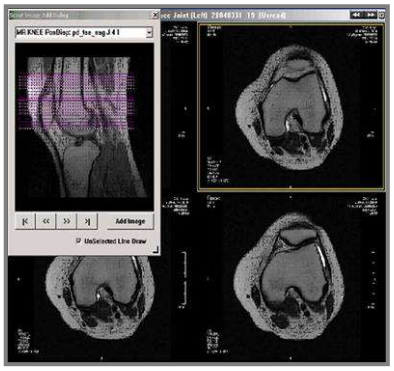
2) Display the image on Scout Image.
Click to change to image of another series.

Converts to first image

Converts to previous

If you check the “Unselected Line Draw” then all scout line will be displayed.

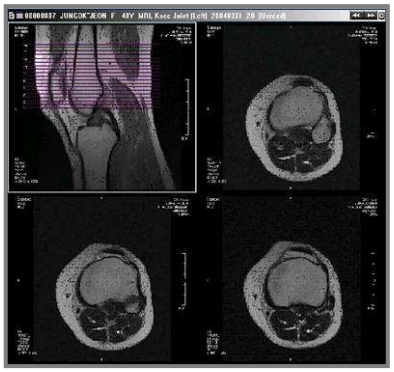




3) In Display Window, if you click the image, the scout line will be displayed as solid line in Add scout image dialog.

4) In Add scout image dialog, if you click the Scout Line, the image will be selected in Display Window.

Click Add Image and scout image will be saved in Series.



In View→Scout Image, if you check Show/Hide, scout image will be displayed to first page.

In View→Popup, Check Scout Image Enable/Disable to display Scout Image as popup window.

Image File Open (DICOM, Non-DICOM)

DICOM File Open

1) Click File->Open DICOM File

2) Select the file to be opened and click OK (Multiple selections with CTRL or SHIFT)

Non-DICOM File Open (JPG, BMP, TIFF)

Click File->Open Non-DICOM File

Select the file to be opened and click OK (Multiple selections with CTRL or SHIFT)

Image File Import / Export

Export

Images can be saved as DICOM, JPEG, BMP or TIFF.

Select the whole image or part of image and click File->Export.

Export Window

1. Select format to be converted
2. Select compression mode in Sub Type.

3. Select the location and click Save.

Import

Open an image by DICOM File Open or Non-DICOM Open and click File->Import.

Type in the information

Database: Select Local or Conference Folder
Patient Information: Input patient information
Study Information: Input exam information
Series Information: Input series information
Applied Range: Select the image to be imported (Selected Images, All Images)
Window Level: After open it in OmniVue Vet and select W/L (Current Value) or Image W/L (Original Value)

Click OK to finish

Compression ratio value

A. Keep Original – Transmit the original image
B. Uncompress – Uncompress and transmit original image
C. Lossless JPEG – Transmit Lossless compression mode (½ ~ ¼ of original image)
D. Lossy (Minimal, Mild, Moderate, Severe, Very Severe) – Transmit lossy compression mode.

Twain Driver Support

Using external twain drivers, you can control film digitizers and acquire film or paper images.

How to Use
1) Click File ⟶ Twain select source from top menu.

2) Select TWAIN driver.

3) Insert film at the digitizer.

4) Click File ⟶ Twain Acquire Multi.

5) Run External Twain program.

6) Scanned image is display on image window of OmniVue Vet.

7) Click File ⟶ Import from main menu.

8) Type patient, study and series, etc.
9) Click OK to store it to the local database of OmniVue Vet.

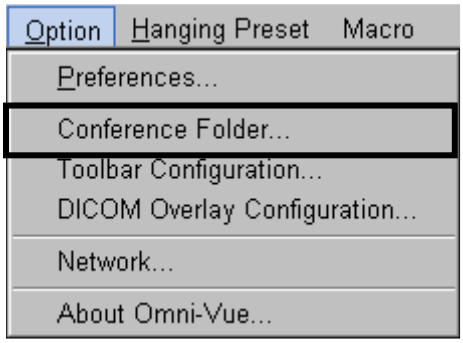
10) You can find imported image in Worklist window of OmniVue Vet.

Conference Folder

Most Doctor wants to make personal database and image for education or study. Conference Folder gives great function for several purposes of doctors. Backup, Conference files, Teaching files and so forth.

Add Conference Folder

1) Click Option->Conference folder



2) Type Name in Folder Name
3) Click Next and Next.
4) Type Author, Folder Name and Folder Description.
5) Click Next, and Finish.

Get Conference Folder

Conference folder, which did backup can be register in OmniVue Vet.
1) Click Option->Conference folder....
2) Click Get Conference Folder and Type [Name] in Folder Name
3) Click Next
4) 4) Click ... to appoint MDB and image path of conference folder.
5) Click Next and Next.
6) Click Finish.

Remove Conference Folder

Delete Conference Folder
1) Click Option->Conference folder....
2) Click Remove Folder. And conference folder to be deleted
3) Click Next and Next.
4) Click Finish.

Image Sending

Transmit the selected images:

Send to E-mail
Send DICOM
Send to Folder

Send to Email

Transmit the image to e-mail by Outlook Express.

1) Select the image to be transmitted to E-mail. (Multiple selection by CTRL or SHIFT)

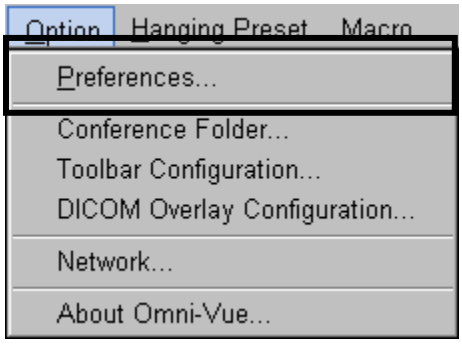
2) Click ‘File -> Send to Email’ to attach the image on outlook.
3) Pre-Configure image type (DICOM, JPEG, BMP, and TIFF)

Go to Option ->Preference ->Environment->email image format

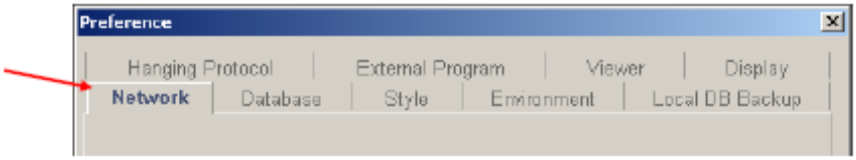
Note:
E-mail account has to be contained SMTP to use this function. Outlook (or Outlook Express) has to be setup in advance

Configuring DICOM Send

1. To add a DICOM recipient, first select Preferences from the Option menu.

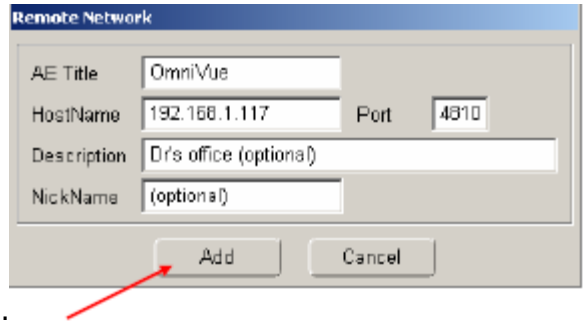


2. Make sure the Network tab is open. Click Add.



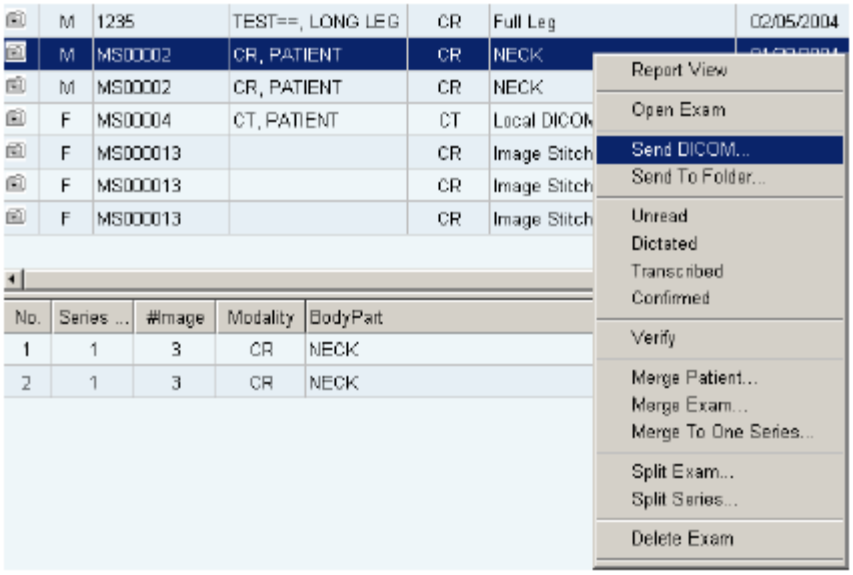
3. To obtain the necessary information to add a recipient, the receiving computer needs to be accessed.
At this workstation, double click on the computer icon in the bottom right-hand corner of the screen (on the taskbar)

4. Then enter the information as shown in the example below. Click



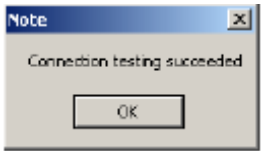
Add.

5. From the Worklist, choose the patient whose images you wish to send by right-clicking on his or her information. Select Send DICOM.

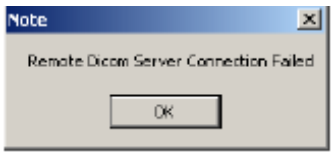


6. The Send Exam window should appear as shown below. Select the desired recipient from the list. Click Connect Test to make sure there is a working connection between sender and recipient.

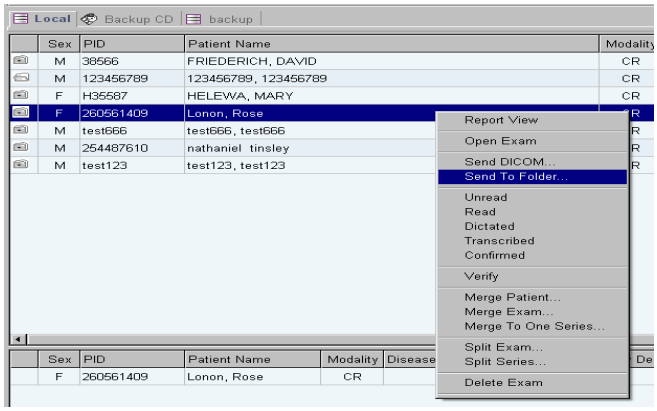
7. If a connection exists, the following window will pop up to confirm.



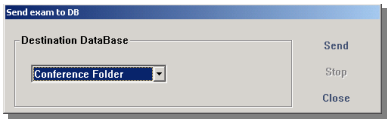
8. To proceed with sending, click the Send button.
9. If the Connection Test fails, the following window will appear. Check the recipient's information to be sure it has been correctly entered.



Send to folder



Right-click on the exam to be transmitted and click *Send to Folder*.



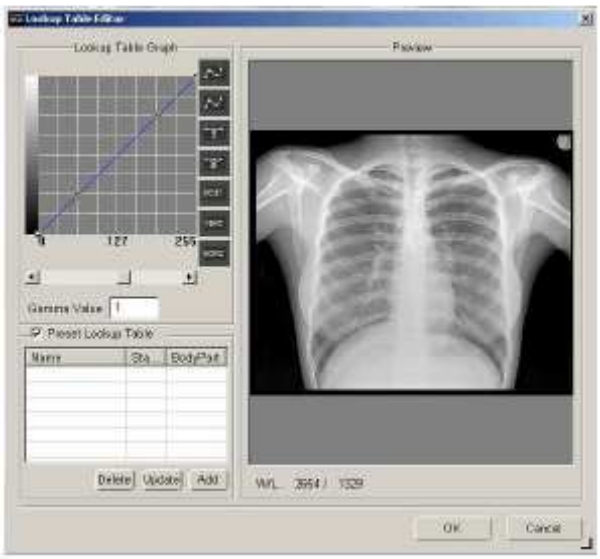
Select Destination Database (Local or Conference Folder) and click *Send*

Image Processing

Adjustment of image quality by: LUT Preset, W/L Preset, Sharpen Preset Hanging Protocol, Rearrange Processing

LUT Preset

OmniVue Vet can expand the image's gray scale range by adjusting the non-linear curve. Adjust the window level value by right-click the image and adjust the curve to assign a more detailed vale
(Apply only to gray-level images of 10 bit or greater)



How to Adjust the LUT Graph

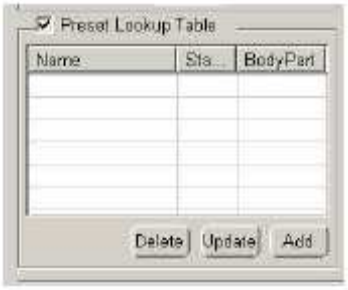
Click LUT preset from top menu.
Drag points on the line to be sigmoid curve and look at the image quality.
Drop points if the quality of image is achieved.

Method I: Drag Pointer
Method II: Input value of Scroll Bar (1) or Gamma Value (2)

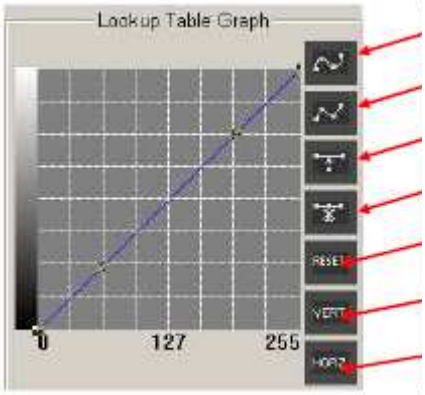
You can preset window level and Lookup Table values for each modality, body part, series or study for images to open with matching values.

How to Preset Lookup Table

1) Open the image then click LUT Preset from main menu.
2) Select Preset Lookup Table after image processing.
3) Click Add. The station name and body part of the selected image are read automatically.
4) Type [LUT Name] and click OK. Station name and body part are registered with LUT value.
5) Click OK.



Lookup Table Tool



_Select from curve-line adjustment graph

_Select from straight-line adjustment

_Add adjustment pointers

_Delete adjustment pointers

_Reset: Reset to initial values

_Vertical: Top/Bottom curve conversion

_Horizontal: Left/Right curve conversion

Note:
Station and body part read in DICOM information and must use to the automatic in the content to be input. If random user input or modify the content, it can't operate AUTO MATCHING.

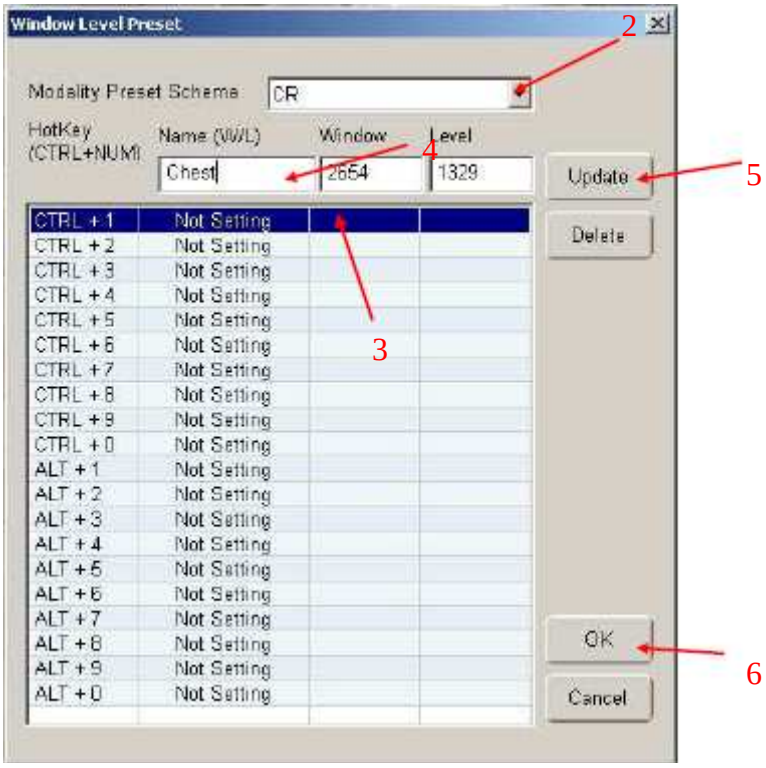
AUTOMATCHING priority is BODYPART –> SERIES DESCRIPTION. If there are series and description information, we should not to register all information. Even LUT AUTO MATCHING applies, the image, which already saved and verified with window level adjustment cannot apply.

W/L Preset

Adjust window level easily with registration of short-cut key.

1) Adjust W/L and click 'W/L Preset_W/L Preset'

2) Modality and W/L value will be input automatically.
3) Click the short-cut key
4) Type in name “Chest”
5) Click “Update”
6) Click “OK” to register

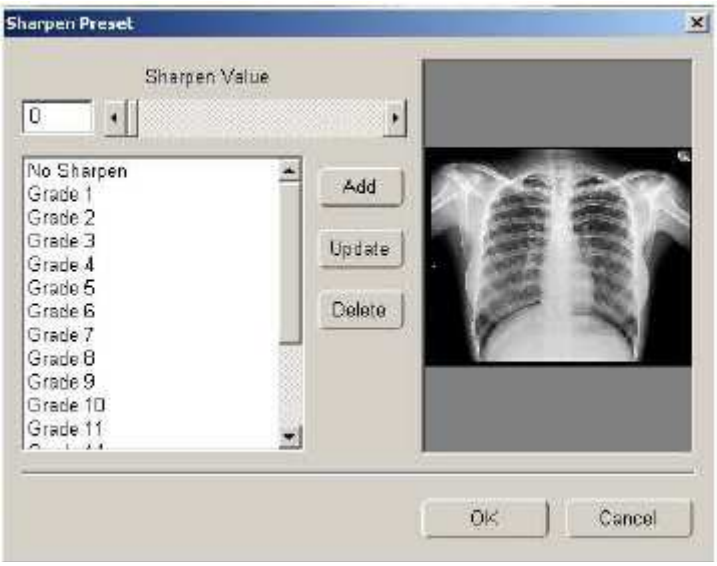


Sharpen Preset

Sharpen value can be adjusted by preset. (17 presets in basic)

1) Click Sharpen Preset to see registered preset. Click the preset to adjust sharpen value of the series.

2) Click Sharpen Preset -> Sharpen Preset to register, delete and adjust preset



Re-Arrange Processing

Arrange the sequence as new.

Re-Arrange Image (Auto)

Click Tool->Rearrange Image

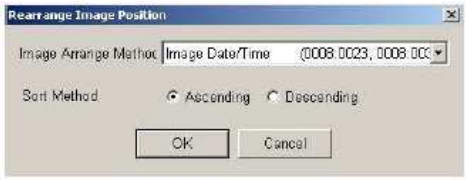


Image Arrange Method: Acquisition Date/Time, Image Date/Time, Image Number
Sort Method: Ascending, Descending

Rearrange Image (Manual)

1) Click Tool->Rearrange Image to change the mode of Rearrange Image. The rim of image will be changed to the blue color.

2) Click the image to change with green color.

3) Insert between two images. If you move the cursor between two images, White bar will be created and click to insert.

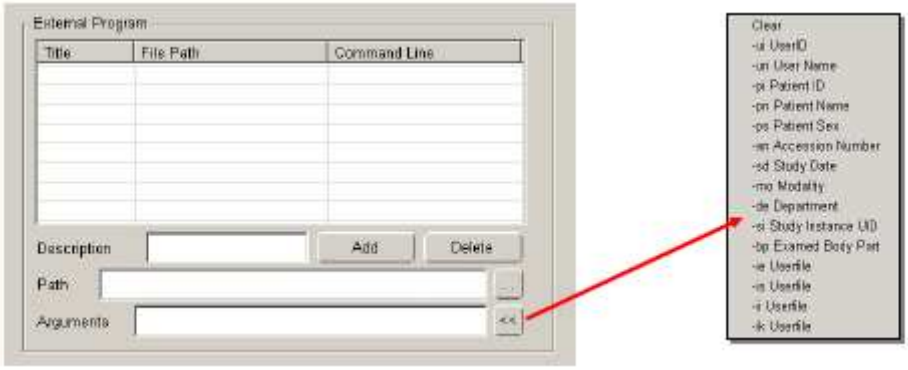
4) To change the location with another image. Move the cursor on the image, which you wish to change, and the rim will be red color and click to switch the location.

Using External Program

External Program registration

1) In OmniVue Vet, Click Option ->Preference
2) Click external program in preference

3) Input description – The explanation about program to register



4) Type the path – Click … of path to register exe file of program

5) Type an argument – Click << of argument to register essential argument. (If no Argument exists then input directly. (See below for all argument explanation)

6) Click add to complete program registration

7) Click OK to finish the Preference Window.

8) Restart OmniVue Vet.

Argument explanation

Clear Initialization the registered Argument
-ui UserID OmniVue Vet User ID call
-un Username OmniVue Vet User Name call
-pi Patient ID PID call of opened exam
-pn Patient Name Patient name call of opened exam
-ps Patient Sex Patient sex call of opened exam
-an Accession Number Accession number call of opened exam
-sd Study Date Study date call of opened exam
-mo Modality Modality call of opened exam
-de Department Department call of opened exam
-si Study instance UID study instance UID call of opened exam
-bp Examed Body Part Body part call of opened exam
-ie Userfile Every images on opened exam will be provided as user file Userfile name need to be assigned directly.
-is Userfile Every images on opened series will be provided as user file Userfile name need to be assigned directly
-ii Userfile Every images on opened selected image will be provided as user file Userfile name need to be assigned directly.
-ik Userfile Every images on opened key images will be provided as user file Userfile name need to be assigned directly
* Contents of Userfile will be created at cache folder automatically when OmniVue Vet external program is running.
External Program registration in Tool Bar
In OmniVue Vet, Click Option -> Toolbar
2) Click external in Toolbar Menu Selection Manager
3) Drag & Drop registered program icon
4) Click OK
5) Registered external program icon came into being at Tool bar.

How to Use External Program

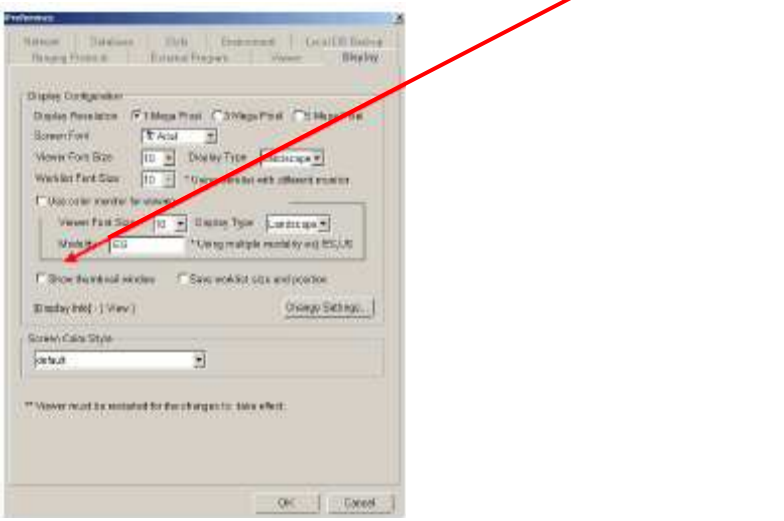
Click the icon at Tool Bar
Or
Click the registered part in Display Window of Tool Menu

Thumbnail Window

Thumbnail window is not configured by default. If you want to use thumbnail window, please configure Thumbnail window as described below.

How to Configure Thumbnail Window On/Off

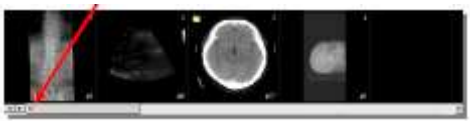
1) Select Option -> Preference ->Viewer on top menu.
2) To use Thumbnail window on image display window, check Show Thumbnail window from Viewer tab or uncheck to not use the window.



How to Hide/Show Thumbnail Window

1) Open exams from Worklist window.
2) Thumbnail image window is displayed when you move the cursor to the bottom of image display window and hides when you move the cursor away.
3) Thumbnail image window displays yellow opened mark on opened series or exams
4) Drag thumbnail image and drop into display window

Layout of Thumbnail Window may be modified by clicking on “<” or “>” button



OTHER FEAUTRES

Copy to Clipboard

OmniVue Vet supports image-editing function for documentation. You may capture the whole image by copying to clipboard or a piece of image by region of interest (ROI)

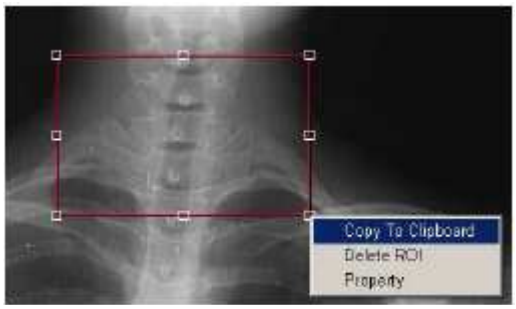
To copy an entire image

1) Select the image and Click Copy to Clipboard

2) Right-click and select Paste or press Ctrl+V on word and PowerPoint.

To copy a part of the image

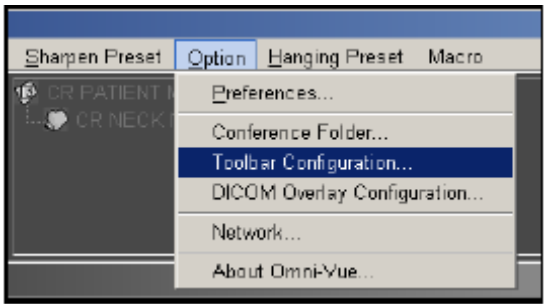
1) Select the image.
2) Click ROI Icon to select ROI type and draw ROI on the image.
3) Right-click on the edge of ROI.
4) Select Copy To Clipboard.



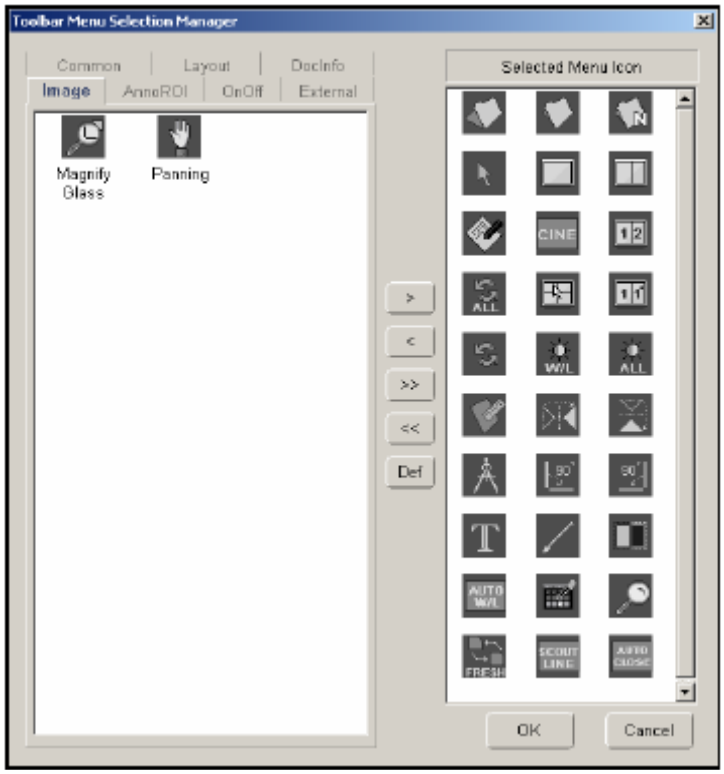
5) Right-click and select Paste or press Ctrl+V on word, PowerPoint.

Toolbar Edit

1. To change the buttons shown on the toolbar, select Toolbar Configuration from the Option menu.



2. The window will appear as shown below.



3. To move an icon from the menu (right) to the toolbar (left), either click and drag the icon, or select the icon and click the < button.

4. Other options:

To move a single icon back to the menu, select the icon and click the > button.

To move all icons from the menu to the toolbar, click the << button.

To return all icons to the menu, click the >> button.

To restore the toolbar to its default settings, click the Def button.

(*Note: If an icon seems to disappear after dragging it from the right to the left, it may be under a different tab. Check the different tabs, including Common, Layout, DocInfo, Image, AnnoROI, OnOff, and External.)

5. Click OK to save your settings.

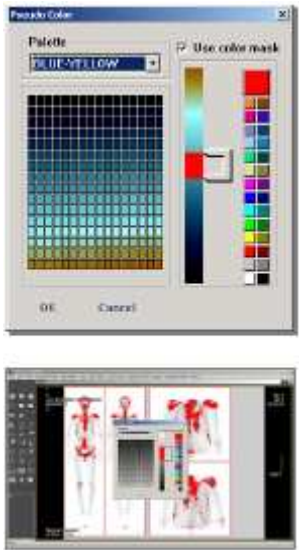
Pseudo Color

Pseudo color lets you mask a gray-scale image with a color of your choice. Check the distribution by window level appointment. Pseudo color function is not supported for color images.

1) Click ‘Annotation->Pseudo Color’ to activate

2) Pseudo color Window

a. Appoint color to be overlay on image.
b. Appoint color to be overlay on range of W/L.
c. Adjust width of Bar and appoint the range which applies appointed color in b. Move the Bar up/down to check W/L of image.
d. Click OK to apply on image.



3) Click OK to apply on image.

Picking

Picking is very similar to Pseudo color. It overlays color which is in range of W/L.

1) Click ‘Annotation->Picking’ to activate.
2) Click the portion to be checked by Picking to overlay color.

3. Adjust color to be overlay and appoint the range, which will be applied.

Inverse

Right-click on image. Click Inverse
Or click on the icon.

Option – Preferences

Network (Local, Remote)

Local

Setup DICOM network information for OmniVue Vet.
Assign AE Title, IP and Port. Then appoint the path, which is saved local image.

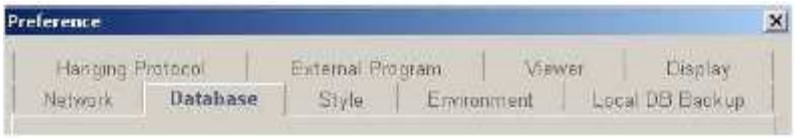
Remote

Register remote host to use Send DICOM.

Click ADD to display registration window.

Type in [AE Title], [Hostname] (IP Address), [Port] of Remote Host
Click ADD

Database (Local, Remote)



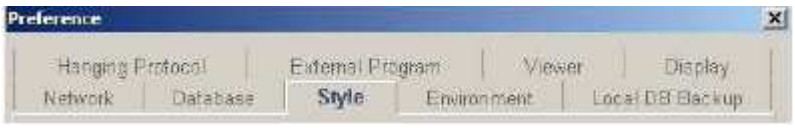
Local

Appoint the path Local Database (OmniVue Vet.mdb) of OmniVue Vet.
(Unchangeable)

Remote

Register Omni-PACS Server to be used in Worklist.
Database Option
Search all Exams for local database
Setup study date of local as all in OmniVue Vet

STYLE



DICOM Information

Change default font settings for DICOM information

Annotation

Appoint color, line thickness and font to be used in Annotation

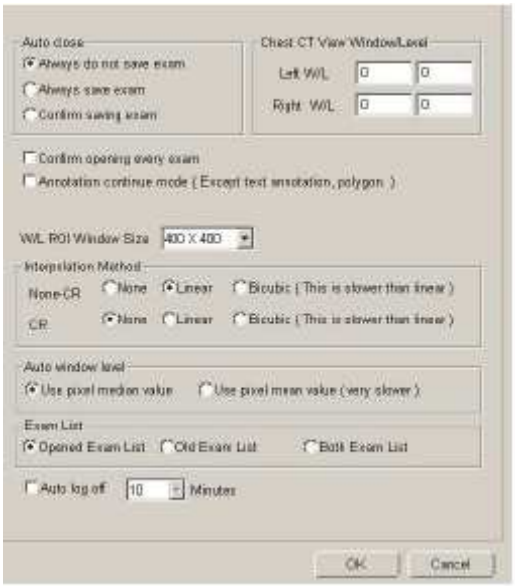
Profile Line

Define color, line and thickness in Profile

Viewer

Chest CT View Window/Level

Setup W/L to be applied for Chest CT View Mode



Auto Close

Option to automatically close an exam

Do not save and close: OmniVue Vet will not save but closes current exam.
Save and close: OmniVue Vet will save current exam without prompting the user.
Confirmed save exam: OmniVue Vet will prompt you to save current exam.

Annotation continue mode

When checked, this function allows same annotation functions in current open series to be used in subsequent series

Window/Level ROI Size

Set size of preview window when Window Level is adjusting. (Restart OmniVue Vet to apply)

Interpolation Method

To apply interpolation (anti-aliasing) functions to different modalities.

Note: Do not apply interpolation on image.

Linear: Apply linear interpolation on image.

Bi-Cubic: Apply more linear interpolation on image.

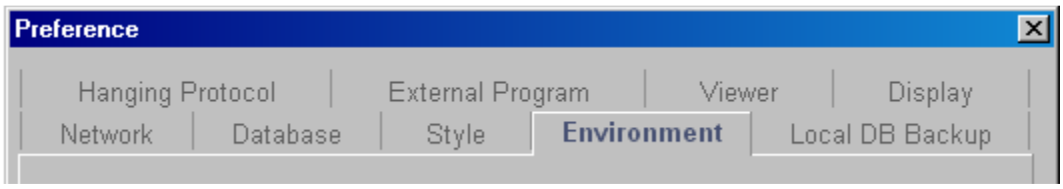
Auto Window Level

Apply automatic window width/level using median value or mean value.

Auto logoff

When checked, OmniVue Vet will automatically log off after configured time.

Environment



LUT Auto Matching

Whenever OmniVue Vet displays image, if this option is set, OmniVue Vet will apply LUT value which is saved in server database or local database to the image.

Cache Image Expire Duration

OmniVue Vet use cache database whenever open image. This option mean how long you want to keep images in the cache database. If you set too long period, your local drive will be full. We recommend set 2 days for keeping period.

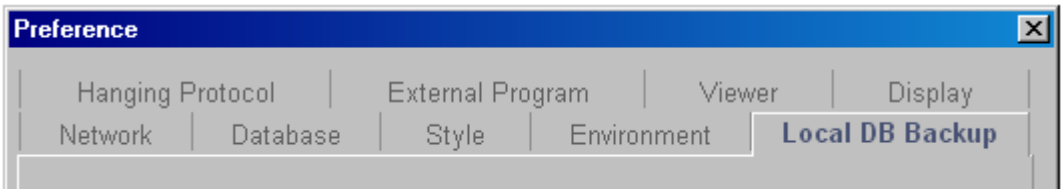
Exam List Refresh Interval

OmniVue will reconnect database and query the database whether the database has new patient or exam for every configured time. It means that OmniVue Vet Worklist will be refreshed every configured time.

E-Mail Image Format

This option is to define type of attached image on e-mail

Local DB Backup



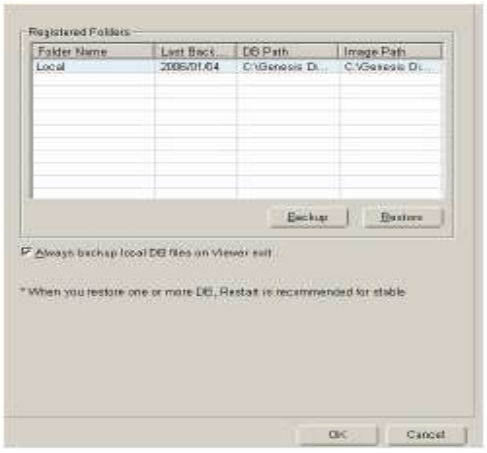
Registered Folders

You can see what database is created in your local system.

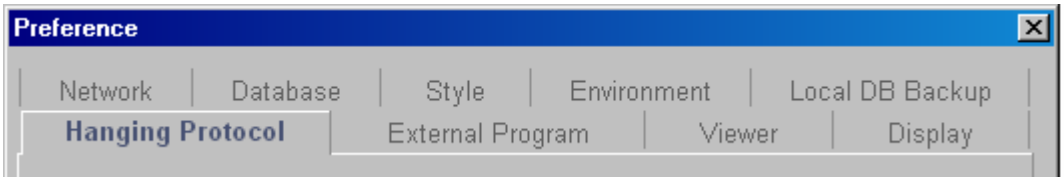
Backup: Backup current selected database on Registered Folders List.

Restore: Restore backup database in your local system.

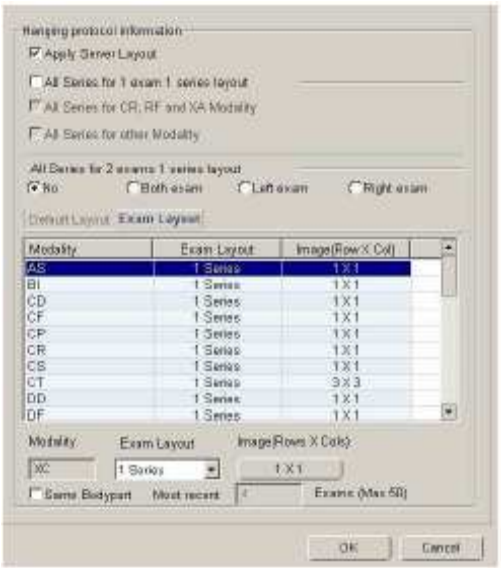
Always backup local DB files on viewer exit: If this option is checked, OmniVue Vet will backup local database when user close the OmniVue Vet



Hanging Protocol



Using the actual hanging
When checked, this option uses default hanging protocols set by PACS administrator.



1exam 1series layout is all series mode

If this option is checked, OmniVue Vet will display images on all series mode if the display layout is set 1exam 1series.

2 exam 1series layout all series

No: OmniVue Vet will not apply all series mode on any other layout condition.

Both exams: OmniVue Vet will apply all series mode for each exam.

Left exam: OmniVue Vet will apply all series mode to be located in left side of monitor.

Right exam: OmniVue Vet will apply all series mode to be located in right side of monitor.

Hanging protocol layouts

You can define series layout and image layout for each modality and OmniVue Vet will display images according to configured layout for each modality

Change Series Layout

In OmniVue Vet, series layouts are defined as follows:

1 Series: Display only one series in the screen.

2 Series: Display two series in the screen. (1Row, 2Column)

4 Series: Display four series in the screen (2Row, 2Column)

2 Exams: Possible to display two exams in one monitor (1Row, 2Column)

Change Image Layout

After selecting series layout, then you have to define image layout. But if you select 1 series in the series layout option, image layout will be fixed by default

CR: You can define 1 by 1 to 2 by 2 layouts.

MR & CT: You can define 1 by 1 to 5 by 5 layouts.

US & OT: You can define 1 by 1 to 4 by 4 layouts.

Default Image Layout

If you set 1series in series layout option, image layout option will be fixed default layout

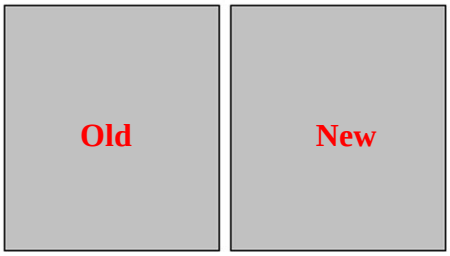
To use Multi Monitors, the features are as follows,

Monitor Link – Basically one monitor on one exam window. It is possible to set the multi monitors as one exam window by monitor link.
Series Link – The monitor is set to one series window if it uses with series link together. (Monitor link)

Ex 1) The case which opens MRI exam with two Monitors.
(Series Layout: 2X2, Image Layout: 2X2)

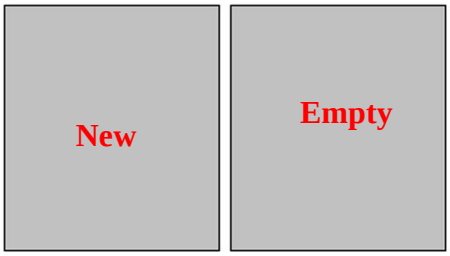
2 Exam Window (New-Old)

Exam Window is identical with each monitor. The MR exam displays on left monitor. (Different exam cannot be displayed concurrently.) The Old exam which has taken lately will be display on right monitor.



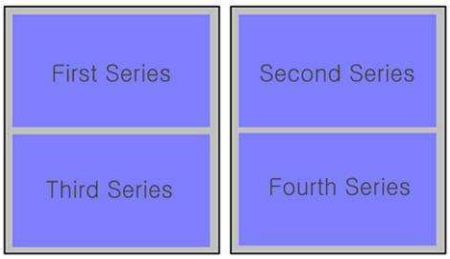
2 Exam Windows (Old-New)

Exam Window is identical with each monitor. The MR exam displays on right monitor. (Different patient's exam cannot be displayed concurrently.) The Old exam which has taken lately will be display on left monitor.



2 Exam Window (New-Empty)

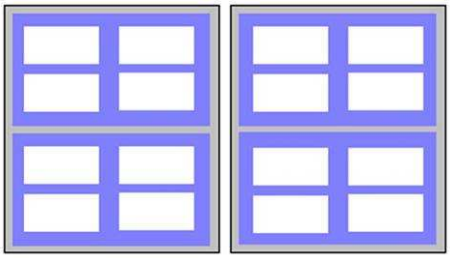
Exam Window is identical with each monitor. The MR exam displays on left monitor. (Different exam cannot be displayed concurrently.) Any other patient's exam can be display on right monitor.



2X2 Series Window

After the series layout sets 2 x 2, the series windows will be created. The basis of order to display is right to left and top to bottom.

(Each series displays orderly when an exam opens.)



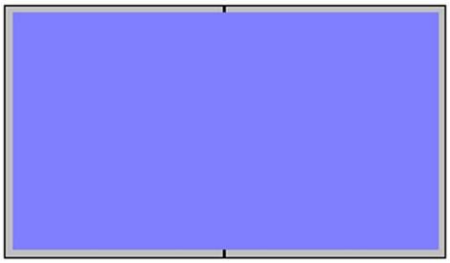
2X2 Image Window

After the image layout sets 2 x 2, 4 images will be displayed on each series window.

Ex 2) The case which opens MRI exam with two Monitors.
(Series Layout: 1X1, Image Layout: 2X2, 1 exam 1series layout is all series mode)

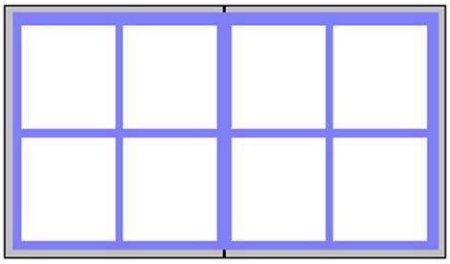
1 Exam Window

Two monitors are recognized as one monitor to create one exam window.



1X1 Series Window

If 1exam 1series layout is all series mode is checked, one series window will be created on two monitors.



2X2 Image Window

Four images on each monitor in series window

will be displayed with 2 x 2 layouts.

User can customize to display exam, series and image.

Displaying Window is divided by Exam Window, Series Window and Image Window. (Appoint series window and image window on an each modality.)

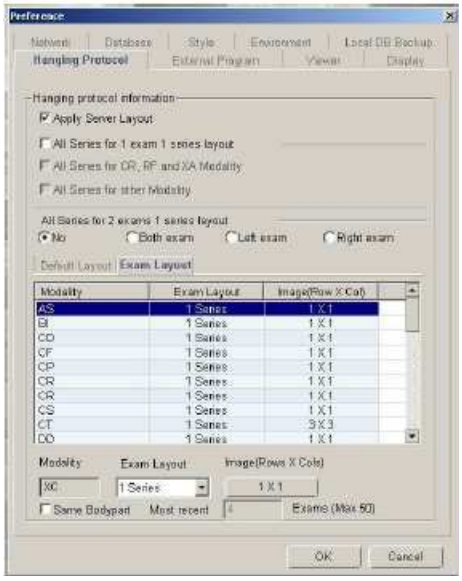
Exam Window: the space to display the exam. For use of hanging protocol, one monitor will be recognized as one exam window.

Series Window: The space that each series is to be seen to be included in exam.

Image Window: The space that images is to be seen to be included in series.

How to set up

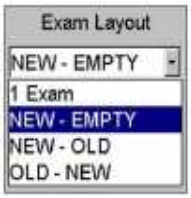
Click Option _ Preference _ Hanging Protocol Tab in Display Window.



1) Exam Layout: Confirm exam layout for each modality.

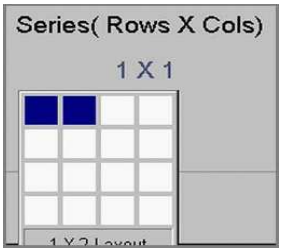
1 Exam: Display only one exam on monitors

New-Old: Display current selected exam on left monitor and the old exam which has taken latest will be displayed on right monitor.
Old-New: Display current selected exam on right monitor and the old exam that has taken last will be displayed on left monitor.

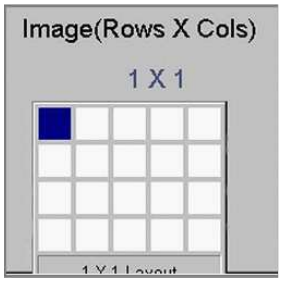


2) Series Layout: Confirm series layout for selected modality.

If Exam layout set to 1 Exam, you can't set odd column for series layout.
Please select series layout regarding as one monitor.



3) Image Layout: Confirm image layout for selected modality.
Once you set series layout, OmniVue Vet will automatically set optimized image layout. You can also set manually.

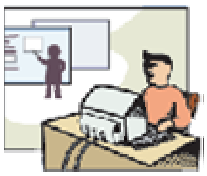


Chapter 4 Applications

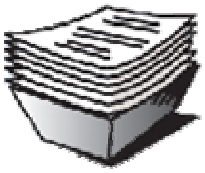
- **Personal purpose**
- **JPEG Image Display**
- **Slide Making**
- **Teaching File Manage**
- **Film Digitizer**
- **External TWAIN Driver**

Applications – Personal purpose

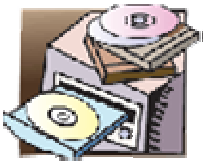
JPEG Image Display
Import function of OmniVue Vet can convert common images (JPEG, TIFF, BMP) to DICOM files and store them into local database of OmniVue Vet. Export function of OmniVue Vet can convert DICOM images to common image format reversely.



Slide Making using DICOM files
OmniVue Vet supports Clipboard for word processor and Power Point, so you can make presentation or word documents easily.



Teaching File Management
OmniVue Vet supports users to make personal database (called by Conference folder), which will be utilized for education, clinical research and so forth.



CD Backup
OmniVue Vet supports DICOM Media Backup for several purpose like teaching file backup, and images burned on CD for transferred patients. OmniVue Vet provides auto-run viewer with patients' images on CD, so that referred doctors don't need to install DICOM viewers on their PCs. When they insert CD in their PC, our auto-run viewer of CD will display the patients' images automatically.

JPEG Image Display

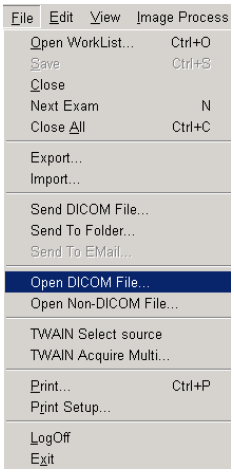
OmniVue Vet can open normal image file and make local database. Exporting selected images, saving them in a popular format such as JPEG, and retrieve the images that you wish to integrate into a single study using 'Open DICOM File' or 'Open non-DICOM File'. If you import retrieved images, they will be integrated into a new teaching file and stored in a local folder.

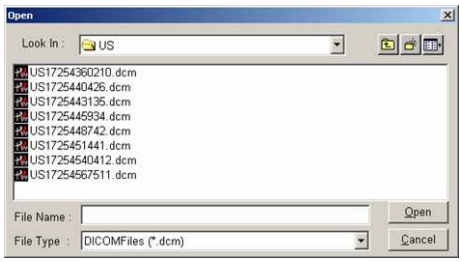
How to Use

Import DICOM Images

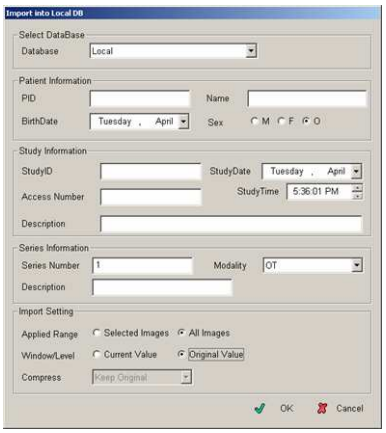
To open DICOM files of selected directory and then store them to the local database of OmniVue Vet. Imported images are stored in the directory of Image of OmniVue Vet.

1) Select *File* > *Open DICOM File*.





2) From window of Open, select images.
3) Select *File* > *Import*.



Patient, *study*, and *series*, *etc* will be displayed. You can modify some of them if you want.

4) Click OK to store them to the local database.
5) You can find imported images at Worklist of OmniVue Vet on the local tab.

Import Non-DICOM Images

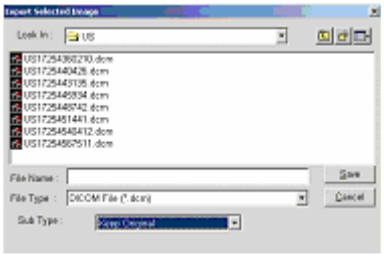
Open non-DICOM file at selected directory and then store them to the local database of OmniVue Vet. Imported images are stored in the directory of Image of OmniVue Vet.

1) Select File → Open Non-DICOM file.
2) From window of Open, select images.
3) Select File→Import.
4) Type patient, study, and series, etc.
5) Click OK to store them to the local database.
6) You can find imported images at Worklist of OmniVue Vet.

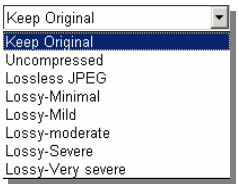
Export

To convert DICOM images to common image file formats (JPEG, BMP, TIFF, etc). You can use this function to save images to the hard disk or a floppy disk which can be utilized for general documentations and presentation materials.

1) Select images from image window.



2) Select *File* > *Export***.**



3) From window of export selected image, type file name and select file format, and then press Save.
4) You can find exported images in the directory you assigned.

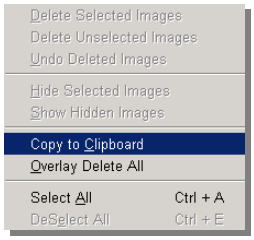
Slide Making

OmniVue Vet basically support image-editing function for documentation.

- Capture whole image by Copy to clipboard.
- Capture a piece of image by ROI (region of interest).
- Slide making using Power Point.

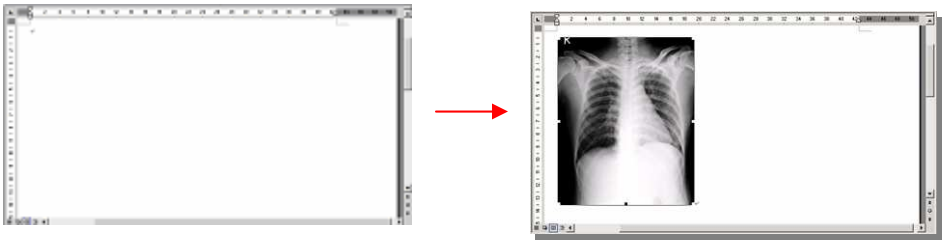
How to Use

To copy an entire image

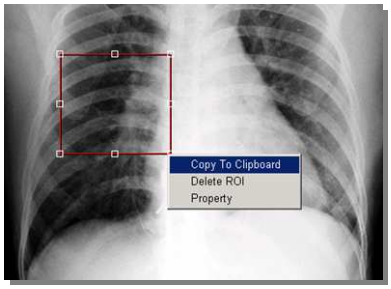


1) Select the image and Click Copy to Clipboard
2) Click Edit > Copy to Clipboard from top menu.

2) Right-click and select Paste or press Ctrl+V on word and PowerPoint.

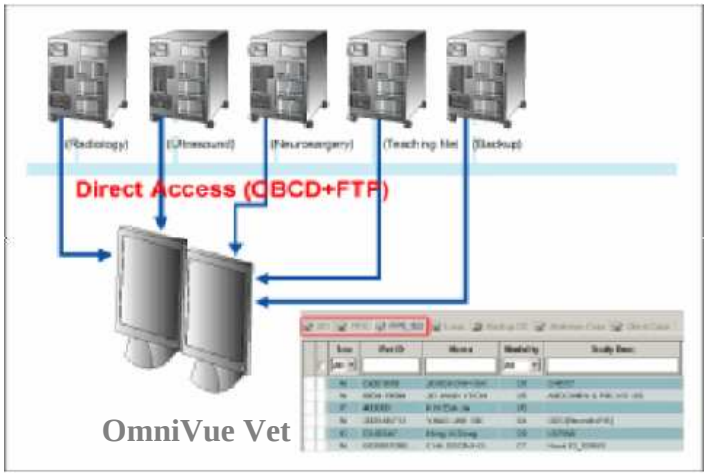


To copy a part of the image



1) Select the image.
2) Click ROI Icon to select ROI type and draw ROI on the image.
3) Right-click on the edge of ROI.
4) Select Copy To Clipboard.

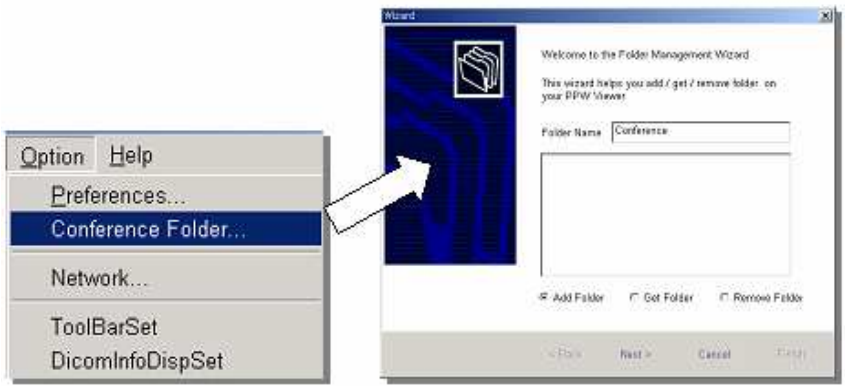
Right-click and select Paste or press Ctrl+V on word, PowerPoint.



OmniVue Vet makes medical doctors and personnel manage their own medical image database for personal purpose. They can manage them according to body parts, specialties, departments, imaging modalities, etc.

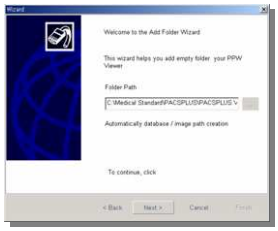
For Education:
For example, to manage MR Brain for the training, Conference DB function of OmniVue Vet is very helpful. They can make CD backup easily and cheaply.
For Research: To prepare the paper and research, Conference Folder of OmniVue Vet can build multiple local databases privately.
For Patient care: To keep case report or special diagnosis, Conference Folder function of OmniVue Vet is very supportive.

How to Create a New Folder in Your Hard Disk

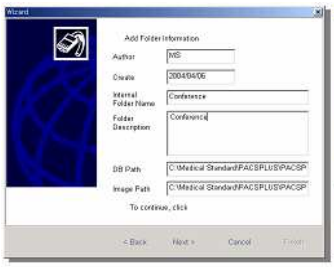


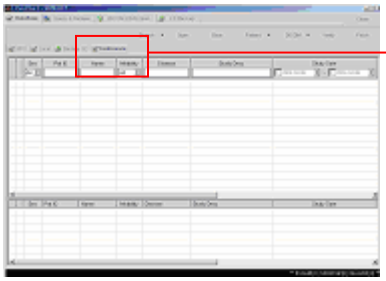
1) Click Option → Conference Folder from top menu

2) Select Add Folder and type folder name with checking Add Folder. And then click
'Next'.



3) Type Folder Path or use it by default and then click Next.
4) Type folder information of author, description, internal folder name) and click Next'.
5) Click Finish.

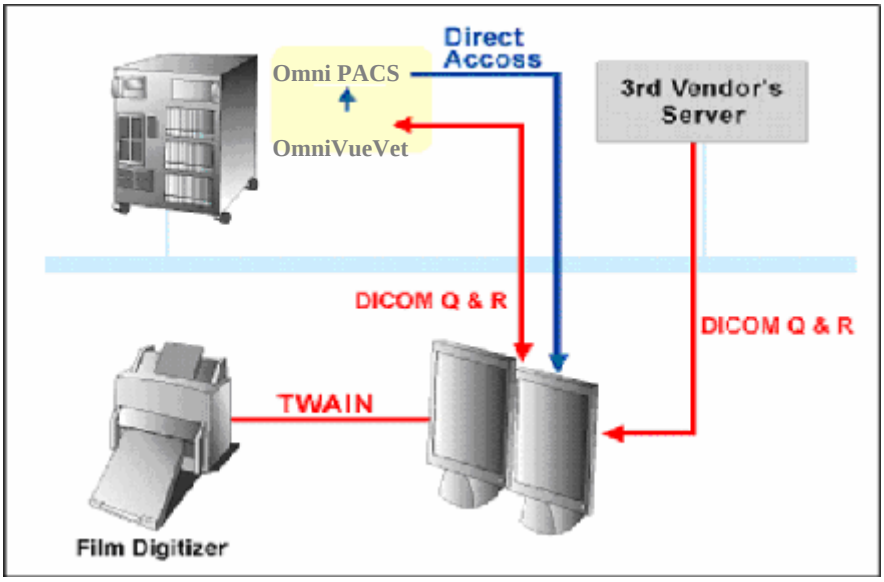




6. Go to the Worklist window and verify that new folder tab created.

Film Digitizer

Basic of connection with film digitizer
Commercial film digitizers can acquire images on digital media and transfer them the personal computers (OmniVue Vet). Those images can be retrieved and displayed on PC and printed using printers.



Checkpoint

To display images (which are acquired by commercial digital cameras) on OmniVue Vet, you need to check the following:
1) Installation of SCSI Cable & SCSI driver to connect your film digitizer to the PC (Film digitizer provides SCSI connection, and the PC need to SCSI card.)
2) Installation the software to edit and visualize images acquired by the film digitizer
3) Installation of OmniVue Vet

External TWAIN

Using external twain drivers, you can control film digitizers and acquire film or paper images.

How to Use

1) Click File → Twain select source from top menu.
2) Select TWAIN driver.
3) Insert film at the digitizer.
4) Click File → Twain Acquire Multi.
5) Run External Twain program.
6) Scanned image is display on image window of OmniVue Vet.
7) Click File → Import from main menu.
8) Type patient, study and series, etc.
9) Click OK to store it to the local database of OmniVue Vet.
10) You can find imported image in Worklist window of OmniVue Vet.

Chapter 5

Trouble Shooting

- **Slow Viewing**
- **Image Not Found**
- **Response Time**
- **Wrong Image Sequence**
- **Login Problems**
- **Local DB Backup**
- **External Report**
- **Error Message**

Trouble Shooting

This category will support professional users who have experiences of Omni PACS products and solutions.

Preference Setting
1) Click Option → Preference from top menu.
2) You can set preference of network, database, style, environment, and viewer.

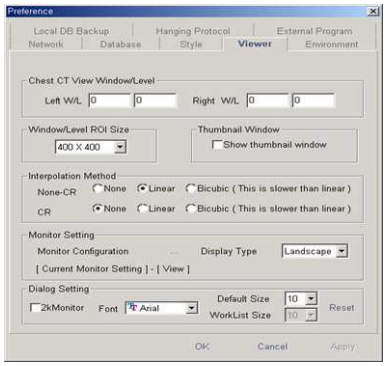
Image display
1) You can rearrange the sequence of images on image display window.
2) How to configure multiple high-resolution grayscale monitors and a color monitor at once.
3) Detail information of scout view for CT and MR images.

Slow Viewing

OmniVue Vet -User Jobs

1) Close all images in OmniVue Vet, which can make memory full.
(Open reasonable number of exams only.)

2) Check Option → Preference → Viewer from the menu. And then select none interpolation for CR.



3) Uninstall unnecessary programs like Game, etc.

4) Check OmniVue Vet configuration like interpolation, automatic cache clearance, etc.

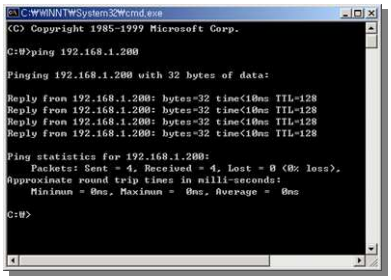
5) Check virus invasions using anti-virus software.

6) Check hardware specification of your PC including CPU, memory and disc space sufficient. Consider upgrading them, if needed.

Omni PACS-Administrator Jobs (Talk to PACS administrator)

7) Ping test from OmniVue Vet to Omni PACS to check network or server problems.
(Start → Run → type CMD → type PING IP Address of network or server)

8) Uninstall or remove unnecessary applications or processors of Omni PACS, for example, Internet information server.



9) Check CPU rate and memory of Omni PACS. Compare the workload to system configuration.

Exam on Worklist without image (Image Not Found)

If, after loading the studies, the above message “Image Not Found” appears in the viewing window, it may be due to one of the following reasons:
1) The database capacity was exceeded during image transfer to the database.
2) You attempted to load the study before the image data had been transferred to the database.

Possible Solutions

1. Check space availability of your local storage.
2. Check FTP connection using DOS command.
3. Compare image-stored path in server’s drive and path in database.

Response Time

OmniVue Vet -User Jobs

1) Close all images in OmniVue Vet, which can make memory full. (Please open reasonable number of opened exams.)

2) Check Option → Preference → Viewer of top menu. And then select None interpolation for CR.

3) Uninstall unnecessary programs like Game, word, etc

4) Check OmniVue Vet configuration like interpolation, automatic cache clearance, etc.

5) Check virus invasions using anti-virus software.

6) Check hardware specification of your PC including CPU, memory and disc space sufficient. Consider upgrading them, if needed.

Omni PACS-Administrator Jobs (Talk to PACS administrator)

7) Ping test from OmniVue Vet to Omni PACS to check network or server problems.

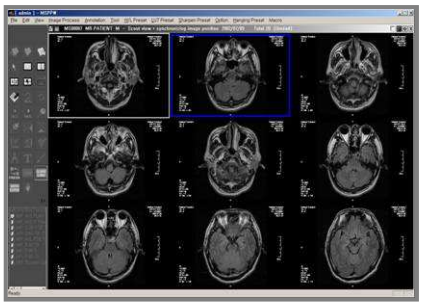
8) Uninstall or remove unnecessary applications or processors from Omni PACS, for example, Internet information server.

9) Check CPU rate and memory of Omni PACS. Compare the workload to system configuration.

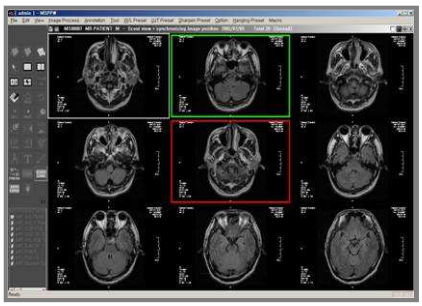
10) OmniVue Vet supports both MS SQL 7.0 and 2K. However the case according to 7.0, the client version is not suitable in OmniVue Vet and DB connection.

Wrong Image Sequence

Rearrange Image (Manual)

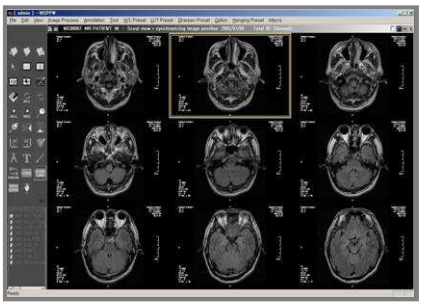


1) Click Tool→Rearrange Image to change the mode of Rearrange Image. The border of image will change to the blue color.
2) Click the image to change to green color.



3) Insert between two images.

If you move the cursor between two images. White bar will be created and click to insert.
4) To change the location with another image. Move the cursor on the image, which you wish to change, and the border will be red color and click to switch the location.



Rearrange Image Position

To rearrange the sequence of images automatically according to Date/Time, Acquisition Date/Time, and Image Number
1) Click Tool → Rearrange image position from the main menu.
2) Select image Arrange Method and Sort Method.
3) Click OK button and then selected images are rearranged according to the selected method.

Rearrange Series

Use the thumbnail window and manually rearrange series.
Thumbnail image is 1 series unit.
1) Open an image
2) Move the mouse down on the image window and then show the thumbnail window.
3) Drag an Image to a Desired Location

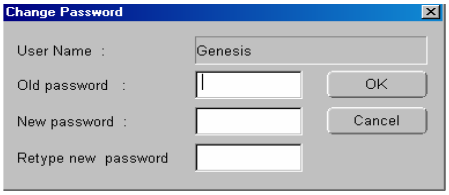
Login Problems

Type User ID & Password

USER Registration

1) In enterprise PACS environment, OmniVue Vet should have made an additional New account to main server by admin tool.
2) Management server accounts and local accounts by separated.
3) Default login user ID and Password for local database of OmniVue Vet are OmniVue Vet.

Change Password
OmniVue Vet user accounts information can be changed



1) Allows the user to change the password.
2) Click Change PW on the log-on screen.
3) Type an old password.
4) Type a new password and click OK.

Log-on Failure

Check 3 cases of login failure.
1) Wrong user Id/Password
2) Server connection error: In cases of server Database troubles, Network troubles, ODBC connection troubles
3) Local Database Error: In case of error on local DB of OmniVue Vet
   a. Click Cancel on error message.
   b. Click OK.

It takes too long to log on.
1) If the initial screen does not appear for a long time after providing your ID and password, there is a problem with the link to the registered server, or the server does not exist on the network. Log on as a local user and go to Option → Preference. Delete the registered server form the database setting or adjust the link configuration.

2) OmniVue Vet supports both MS SQL 7.0 and 2K. However the case according to 7.0, the client version is not suitable in OmniVue Vet and DB connection. The speed comes to be slow. Consequently we strongly recommend you to use MS-SQL 2K.

Local DB Backup

OmniVue Vet has two local Database (Master mdb and OmniVue Vet mdb
Conference folder has unique mdb of itself
Master mdb
What is master mdb
Necessary of the OmniVue Vet operating
It has the basis information of OmniVue Vet start and log on
ex) Database, User and password, User level, network...

Chapter 6

Appendix

- **Delete Data from Local DB**
- **Import**
- **Send DICOM**
- **Toolbar Icon Description**
- **Pull Down Menu**
- **Short Cut Key**

Delete data from local database

When an image is deleted, the data is supposed to be in local DB.
To open DB, MS access 2000 has to be installed in the PC.

OmniVue Vet mdb contains data that is in local tab of worklist.
To delete the data that related with exam, the method is as follows.

How to Delete Data from Local DB

Delete Data from OmniVue Vet
1) Double Click OmniVue Vet.EXE Icon.
2) Type Login ID, Password.
3) Search data from Worklist.
4) Select Data.
5) Right Click.
6) From Pop up Menu, Click Delete Exam.
7) From Exam Delete, Click Yes.

Delete Data from Microsoft Access

1) Double Click Microsoft Access Icon.
2) From Micro Access, Click Cancel.
3) Click Option of main menu, and then click File → Open
4) From Open, Search local DB file from Look in and then click Open.
File location C:\Genesis Digital Imaging\OmniVue Vet \Database\OmniVue Vet.mbd
5) From OmniVue Vet DataBase, Double Click PatientTab, StudyTab, SeriesTab and ImageTab.
6) Select delete data (PID: Patient ID) in PatientTab.
7) Select Studykey in StudyTab
8) Select SeriesKey in SeriesTab.
9) Select ImageKey at ImageTab and Delete record drag.
10) Right Click and From Popup Menu.
11) Click Delete Record (Exam Real Delete),

Tip: Delete Data sequence

Image record → Series record → Study record → Patient record

Localization DICOM image

When DICOM image import, patient information for DICOM Header has to be input manually. We recommend number 2 that is the method to DICOM sends to local and open DICOM image.

There are two ways to add DICOM File in local worklist.

1) Method 1: Import Open DICOM File and Open Non-DICOM File to.

2) Method 2: DICOM sends File to local and open DICOM Image.

 Recommend Method 2

Import

Import function open DICOM and non-DICOM images. If they are non-DICOM images, it converts them to DICOM files and stores them at local database.

How to Import

Open DICOM Files

1) Click File of main menu, and then click Open DICOM File....
2) From Open, Search DICOM file in Look In.
3) Select DICOM File.
4) Click Open.
5) Click File of main menu, and then click Import.
6) From Import into local DB.
7) Type Select Database, Patient Information, Study Information, Series Information and Import Setting.

Open Non-DICOM File

1) Click File of main menu, and then click Open Non-DICOM File....
2) From Open, Search Non-DICOM file in Look In.
3) Select Non- DICOM File.
4) Click Open.
5) Click File of main menu, and then click Import.
6) From Import into local DB.
7) Type Select Database, Patient Information, Study Information, Series Information and Import Setting.
For example, see 1. Open DICOM Files.
8) Click OK.

Send DICOM

You can use the Viewer's local DICOM server to exchange images with remote DICOM servers or viewers.

How to Send DICOM

1) Select exams in Worklist.
2) Right-Click, and then display Popup Menu.
3) Click Send DICOM.
4) From Send Exam, select Destination Hostname, and then click Connect Test (DICOM network connection test).
6) Select Compress Method among keep Original, Uncompression, Lossless JPEG, Lossy-Minimal, Lossy-Mild, Lossy-Moderate, Lossy-Severe, or Lossy-Very severe.
7) Click Send.

Notice:
When you have Image display or transmission problem due to Compression status of stored images, we recommend you to select Uncompression of 6) which makes compressed images decompressed and transmitted.

Tool Bar Icons

File Management

Open Work List

Close Image

Close current exam/Open next

Arrow (Default Mouse pointer) **[Esc]**

Display Management

Single Image

Two Image Display - Horizontal

Two Image Display – Vertical

Four Image Display- 2 by 2

Series Layout

Chest CT View Mode

Compare View Mode

Display Original

Display All Original

Stack/Tile View

Image Management

Window Level **[Shift + W]**

Window Level All

Flip Horizontal

Flip Vertical

Rotate CW

Rotate CCW

Zoom In/Out **[Shift + Z]**

Magnifying Glass **[Shift + G]**

Measure **[Shift + M]**

Angle

Annotation

Compare Measure

Arrow Line

Inverse

Pan [Shift + P]

Print Management

Printer Launch

ROI

Auto Contour

Draw Circle

Draw Polygon

Draw Rectangle

Draw Hand

Free Draw

More Icons

DICOM Header View

View Pixel Value

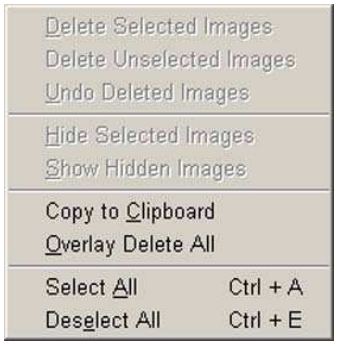
Comments

Report **[Shift + R]**

Pull Down Menu

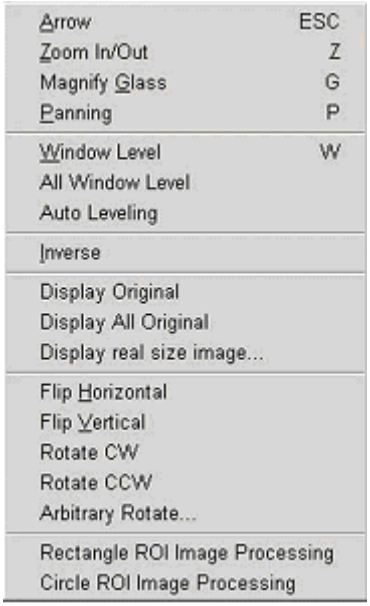
File

Edit

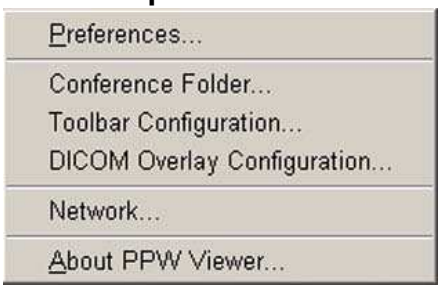


View

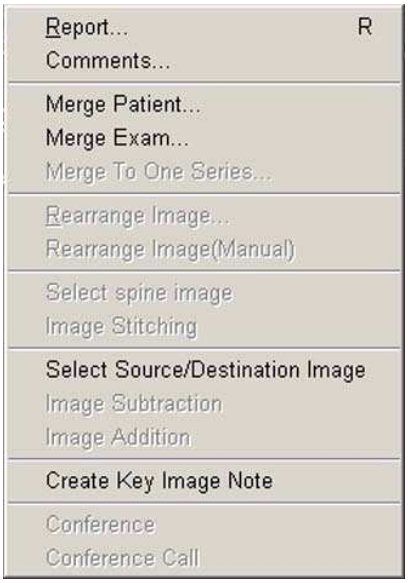
Image Process



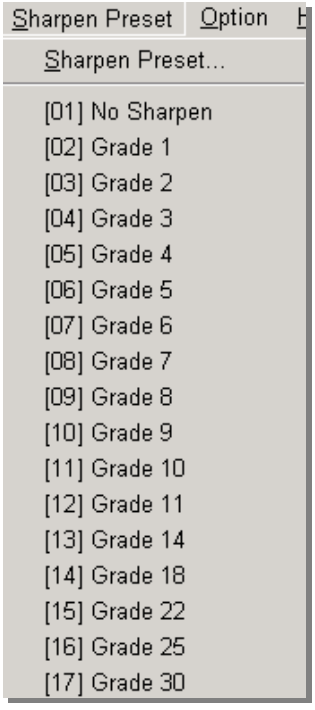
Option



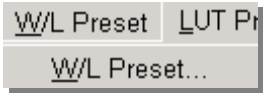
Tools



Sharpen Preset



W/L Preset



LUT Preset